



AMANO Corporation

ENVIRONMENTAL SYSTEMS

GENERAL CATALOG

- Dust collectors
- Vacuum cleaners
- Mist collectors
- Pneumatic conveying systems

www.amano.co.jp/English/environmental.html



AMANO Corporation

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<http://www.amano.co.jp/English/environmental.html>

Design and specifications are subject to change without notice.

Using engineering to the max to solve eco-issues
and problems from Japan to the world!

Cleaner, faster, with more satisfaction.

Amano has been meeting customer production plant needs since 1951 when it first started working on environmental issues. We can provide continual support for ever-evolving production plant engineering since we continuously upgrade and refine our tech skills.

Our production engineering is known worldwide as the No. 1 catalyst for Japanese craftsmanship. We do our part by helping to lower labor accidents and reduce accidents!

Our work doesn’t end there! We also make tech breakthroughs that precisely capture market and social needs such as by improving work efficiency, boosting production and removing toxic substances to continuously produced products that are just what the customer wants!

Amano is also currently enlarging its playing field to include not only Japan but the rest of the world as well.
















High-level environmental tech fostered in Japan to all types of factories the world over.



Total engineering to environmental issues confronting plant management.

CONTENTS





■ Product Lineup	
Merchandise list	3~4
■ Compact Dust Collectors	
General dry dust type	5~9
Food factories and Pharmaceutical factories	9~10
Welding work	11
Laser marking & Laser processing	12~14
For inflammable-combustible dust	14
Pre-dust box	15
Cyclone	15
■ Vacuum Cleaner	
General dry dust type / Central Cleaning	16
For potentially explosive power or dust	17
■ Mist Collectors	
Electric collection type mist collector	18~20
Filter Less	21
Filter type	21~22
■ Dust explosion pressure diffusion type dust collector	
For potentially explosive powder or dust	23~24
■ Large-scale Dust Collection Systems	
Plate filter	25
Woven filter	25
Molded cartridge filter	26
Large-scale Dust Collection specifications	27~32
■ Pneumatic Conveying Systems	
Large volume conveyor (up to 200 tons per hour)	33
Small volume (up to 2 tons per hour)	34
■ Filter	
Filter for Small Dust Collectors	35
Filter for Large-scale Dust Collectors	36
■ Dust and powder explosions	
Dust and powder explosions	37
Guide to selecting hood types & required air flow	38
Exhaust ventilation (dust removal) device periodic self-inspection guidelines	39~40
Examples of installation	41~42
For Safe Operation	43~46

Compact Dust Collectors

	Low pressure (static pressure up to 3 kPa)		Mid-to-high pressure (static pressure 5kPa or more)	
	Manual shaking	Pulse jet	Manual shaking	Pulse jet
General dry dust	 VF-5N P5, IS-15 P5, VNA P6	 PiF P6~7	 VF-2S P8	 Mi P8, IP/IX/IB P9
For inflammable-combustible dust	 SS-N P14			
For potentially explosive power or dust <div>With explosion pressure diffusion port</div>	 VNA-SDN P23, VN-SD P23	 PIE-SDN P24, PiF-D/SD P24		 IP-D/IX-D/IB-D P9
Food factories and Pharmaceutical factories	 SP P10			 FP-N P9, FPV-2S P10
For laser markers	 VF-5HN P13, VF-5H P13	 PiH P14	 VF-5HG P12	
Welding work	 FD-10 P11, HF P12	 FCN P11		

Preprocessing device	Cyclone	 P15 SR
	Centrifugal pre-dust box	 P15 DB

Vacuum Cleaners












	Manual shaking	Pulse jet
General dry dust	 P16 V-Z	 IPR/IXR P16, ACR-PK P16
For potentially explosive power or dust <div>With explosion pressure diffusion port</div>	 P17 V-SDR	
For toners (organic powder)	 P17 VF-2LD	

We will exchange confirmatory notes after the business discussion below. Please contact our dealer for more information.

- A "product export application confirmatory note" is required for the export business discussion.
- Please inquire to our company sales representative if a certificate of non-applicability is required.
- A "Consultation confirmatory sheet" is required on dust explosion pressure diffusion type dust collectors & vacuum cleaners, welding work dust collectors and wet type dust collectors.
- Business discussions for dust explosion pressure diffusion type dust collectors & vacuum cleaners require performing an explosion test and a hazard rating (billable).







①Explosion index (Kst value) ②Maximum explosion pressure (Pmax) ③Minimum ignition energy (MIE)

Large-scale Dust Collectors









	Medium and lower pressure (static pressure up to 5 kPa)		High pressure (static pressure up to 20 kPa) Medium air volume (up to 100m³/min[3531cfm])
	Large air volume (up to 1000m³/min[35315cfm])	Medium air volume (up to 100m³/min[3531cfm])	
Plate filter	 SNP P25		
Woven filter	 SI P25		
Woven filter	 WRT P25	 BV P25	 CT P25
High-temperature toxic gas eliminator system	 HGD P26		
Molded cartridge filter	 WRT-ST P25	 PPC P26	 MF P26
Bag-in bag-out type	 TFP P26		
Stainless steel specifications (for high pharmacologically-active powder)	 TFP-S P26		

※WRT-ST is equipment having a molded cartridge filter mounted in the WRT unit.
※The bag-in bag-out concept utilizes a dedicated filter to allow replacing filters & ejecting dust without touching the filter or dust.

Mist Collectors

	Electrostatic precipitator	Self-Cleaning	Filter type	Filter less
Large air volume (50m³/min [1765cfm] or more)	 EM-eH P20		 MS P22	
Small air volume (up to 50m³/min [1765cfm])	 EM-8eII P18, EM-eII P18	 EM-SC P19, EM-SCIIlt P19	 MZ P21, MC-45 P22	 MJ P21

Pneumatic Conveying Systems

			Pressure feed	Vacuum feed
Large volume conveyor (up to 200 tons/h)	High pressure (Compressor)	Blow pot type	 HAF P33	
		High sealing feeder type	 HSF P33	
Small volume conveyor (up to 2 tons/h)	Low pressure(Blower)		 LAF P33	 VAF P33
		Blower type		 FPV P34
	For foodstuff and pharmaceutical plants	Ejector pump type		 AGR P34
	For general-purpose plants and factories	Blower type		 FV P34
		Ejector pump type		 EV P34

VF-5N

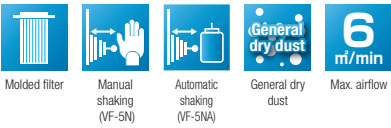
Minisize fits securely into work bed.
Compact size and low-noise make it ideal for indoor work.

Compact body



Molded cartridge filter

Compact dust collector



Specifications

Model		VF-5N		VF-5NA	
Power supply		Single phase 100V or 3-phase 200V 50Hz or 60Hz (or voltage/frequency listed on product name plate)			
Output	KW	0.4			
	HP	0.5			
Airflow	m³/min	0	3.5	6.0	
	cfm	0	123	211	
Static pressure [kPa]		2.65	1.76	0.98	
Filter	Area	1.6			
	ft²	17.2			
	Quantity	1			
	Shape/Material	Molded cartridge/Polyester Spunbond			
	Dust removal	Manual shaking	Automatic shaking		
Bucket capacity	L	6.5			
	U.S.gallon	1.7			
Recommended breaker [A]		15 (Single-phase 100V) / 5 (3-phase 200V)			
Power cord	m	● Single-phase 100V, 2.3 (3 core with plug) ● 3-phase 200V, 2.7 (4 core without plug)			
	inch	● Single-phase 100V, 90 (3 core with plug) ● 3-phase 200V, 106 (4 core without plug)			
Suction port diameter	mm	φ63.5			
	inch	φ2.5			
Dimensions W×D×H	mm	380×500×623			
	inch	15.0×19.7×24.6			
Weight	kg	43	46		
	lb	95	102		
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833			

IS-15

Superb dust collection capability and easy handling!

Built-in cyclone



Molded cartridge filter

Dust with a built-in cyclone



Specifications

Model			IS-15		
Power supply			3-phase 200V 50/60Hz common use		
Output		kW	0.75		
		HP	1		
50Hz	Airflow	m³/min	0	6.0	9.0
		cfm	0	211	317
	Static pressure [kPa]	2.0	1.1	0.4	
60Hz	Airflow	m³/min	0	7.5	11.0
		cfm	0	264.8	388.4
	Static pressure (kPa)	2.8	1.5	0.4	
Filter	Area	m²	4.1		
		ft²	44.1		
	Quantity	1			
	Shape/Material	Molded cartridge/Polyester Spunbond			
Dust removal		Manual shaking			
Bucket capacity	L	20			
	U.S.gallon	5.2			
Recommended breaker [A]		10			
Power cord	m	3 (4-core, without plug)			
	inch	118 (4-core, without plug)			
Suction port diameter [mm]	mm	ø125			
	inch	ø5			
Dimensions W×D×H	mm	649×649×1462			
	inch	25.6×25.6×57.6			
Weight	kg	70			
	lb	155			
Paint color		J(PMA (Japan Paint Manufacturing Association) (Body F35-85A, Top/Bottom YN40)			

Molded cartridge filter has internal jet amplifier to boost the unique Amano in-house jet effect.

Hosoe Factory manufactures products under strict quantity supervision.



Hosoe Facility

8123 Kiga, Hosoe-cho, kita-ku, Hamamatsu, Shizuoka-ken

VNA

Standard model designed to pursue high-quality finished basic performance.

Dust collector



Woven plate filter

Specifications

Model		VNA-15			VNA-30			VNA-45			VNA-60			VNA-120		
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V														
Output	kW	0.75			1.5			2.2			3.7			7.5		
	HP	1			2			3			5			10		
Airflow	m³/min	0	7.5	12	0	15	28	0	22	40	0	30	55	0	60	110
	cfm	0	264	423	0	529	988	0	776	1412	0	1059	1942	0	2118	3884
Static pressure [kPa]		2.45	1.77	0.69	2.55	2.10	1.20	2.55	2.20	1.00	2.90	2.35	0.80	3.20	2.94	0.70
Filter	Area	4.5			9.0			13.5			18.0			36.0		
	ft²	48.4			96.8			145.2			193.6			387.3		
	Quantity	1			2			3			4			8		
	Shape/Material	Woven plate/ canvas														
Dust removal		Manual shaking			Manual shaking (Option: Automatic shaking)											
Bucket capacity	L	18			25			36			50			25×4 (BS type)		
	U.S.gallon	4.7			6.6			9.5			13.2			6.6×4 (BS type)		
Recommended breaker [A]		10			15			20			30			60		
Power cord	m	3 (4-core, without plug)														
	inch	118 (4-core, without plug)														
Suction port diameter	mm	φ127			φ150			φ200			φ200			φ300		
	inch	φ5			φ6			φ8			φ8			φ12		
Dimensions W×D×H	mm	650×400×1205			650×650×1492			850×650×1542			1100×700×1652			1174×1464×1796		
	inch	25.6×15.8×47.5			25.6×25.6×58.8			33.5×25.6×60.8			43.4×27.6×65.1			46.3×57.7×70.8		
Weight	kg	92			145			180			270			510		
	lb	203			320			397			596			1125		
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833														

PiF 15/30/45/60

Auto energy-saving operation via inverter & premium efficiency motor.

Pulse jet type (By differential pressure detection)

Automatic airflow control



Molded cartridge filter (length:500mm)

Energy and space-saving pulse-jet dust collector



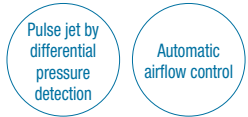
- Energy Saving
- Premium efficiency motor (IE3)
- Inverter control improves filter life
- Easy filter replacement
- Data logging function

Specifications

Model		PiF-15				PiF-30				PiF-45				PiF-60				
Power supply		3-phase 200V 50/60Hz common use																
Motor	Output	0.6				1.35				2.0				3.1				
	kW	0.8				1.8				2.6				4.1				
	HP																	
Inverter	Efficiency	Standard equipment																
		IE2				IE3												
Airflow	m³/min cfm	0	10	18	0	20	30	0	30	45	0	40	60					
		0	353	635	0	706	1059	0	1059	1589	0	1412	2118					
Static pressure [kPa]		2.65	1.80	0.50	2.65	2.06	1.08	2.65	1.96	0.64	3.00	2.26	0.98					
Filter	Quantity	2				4				6				8				
	Shape	Molded cartridge (length:500mm)																
	Dust removal	Automatic pulse jet (By differential pressure detection)																
	Material	Polyester Spunbond																
	Area	m² ft²	6.0				12.0				18.0				24.0			
			64.5				129.1				193.6				258.2			
Compressed air consumption [L/min]		30				36				45				67				
Diaphragm valve [pcs.]		2				2				3				4				
Bucket capacity	L									14×2				22.5×2				
	U.S.gallon					5.9				3.6×2				5.9×2				
Recommended breaker [A]		10				15				20				30				
Power cord	m inch	3 (4-core, without plug) 118 (4-core, without plug)																
Suction port diameter	mm	φ127				φ150				φ200				φ250				
	inch	φ5				φ6				φ8				φ10				
Dimensions W×D×H	mm	520×650×1200				520×650×1617				680×650×1645				950×650×1797				
	inch	20.5×25.6×47.2				20.5×25.6×63.7				26.8×25.6×64.8				37.5×25.6×70.7				
Weight	kg	127				163				208				315				
	lb	280				360				459				695				
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A																

PIF 75/120/150

Pulse jet type dust collector
Handles air flow of 60m³/min or more.



Pulse jet type dust collector

- Energy Saving
- Premium efficiency motor(IE3)
- Inverter control improves filter life
- Easy filter replacement
- Oneside filter inlet



Specifications

Model		PIF-75			PIF-120			PIF-150		
Power supply		3-phase 200V 50/60Hz common use								
Motor	Output	kW			7.5			11.0		
		HP			10.0			15.0		
	Inverter Efficiency	Standard equipment IE3								
Airflow	m³/min	0	60	90	0	80	110	0	120	180
	cfm	0	2118	3178	0	2825	3884	0	4237	6356
Static pressure [kPa]		3.10	2.50	0.70	3.20	2.50	0.60	3.10	2.50	0.70
Filter	Area	m²			57.6			86.4		
		ft²			620			930		
	Quantity	8			12			18		
Shape / Material		Molded cartridge (length:750mm) / Polyester spunbond								
Dust removal		Automatic pulse jet (by differential pressure detection)								
Compressed air consumption [L/min]		75			86			100		
Diaphragm valve [pcs.]		4			6			6		
Suction port diameter	mm	φ300			φ300			φ380		
	inch	φ12			φ12			φ15		
Recommended breaker [A]		50			60			75		
Power cord		Option(4-core)								
BO type	Dimensions W×D×H	mm			1398×950×1731			1484×1000×2439		
		inch			55.0×37.4×68.3			58.4×39.3×96.0		
	Weight	kg			460			710		
		lb			1015			1565		
Bucket BS type	Dimensions W×D×H	mm			1398×950×2062			1484×1000×2770		
		inch			55.0×37.4×81.1			58.4×39.3×109.0		
	Weight	kg			550			780		
		lb			1213			1719		
Bucket BL type	Bucket capacity	L			22.5×3			22.5×3		
		U.S.gallon			5.9×3			5.9×3		
	Dimensions W×D×H	mm			1413×965×2382			1497×1013×3154		
		inch			55.6×38.0×93.7			58.9×39.9×124.1		
Hopper F type	Weight	kg			570			810		
		lb			1257			1785		
	Bucket capacity	L			130			130		
		U.S.gallon			34.3			34.3		
Hopper F type	Dimensions W×D×H	mm			1410×962×3832			1496×1012×4710		
		inch			55.5×37.9×150.8			58.9×39.8×185.4		
	Weight	kg			820			1090		
		lb			1808			2403		
Hopper F type	Bucket capacity	L			610			778		
		U.S.gallon			161.1			205.5		
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A								

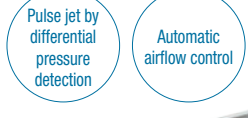


Molded cartridge filter (length:750mm)



PIF 200/300

Pulse jet type dust collector
Handles air flow of 160m³/min or more.



Pulse jet type dust collector

- Energy Saving
- Premium efficiency motor(IE3)
- Inverter control improves filter life
- Easy filter replacement
- Oneside filter inlet



Specifications

Model		PIF-200				PIF-300			
Power supply		3-phase 200V 50/60Hz common use							
Motor	Output	kW		15.0		22.0			
		HP		20.0		30.0			
	Inverter Efficiency	Standard equipment IE3							
Airflow	m³/min	0	160	190	0	240	290		
	cfm	0	5650	6709	0	8475	10238		
Static pressure [kPa]		4.00	2.40	0.40	4.00	2.40	0.40		
Filter	Area	m²		115.2		172.8			
		ft²		1240		1860			
	Quantity			24		36			
	Shape / Material	Molded cartridge (length:750mm) / Polyester spunbond							
Dust removal		Automatic pulse jet (by differential pressure detection)							
Compressed air consumption [L/min]		100				100			
Diaphragm valve [pcs.]		8				12			
Suction port diameter	mm	φ450				φ580			
	inch	φ17.8				φ22.9			
Recommended breaker [A]		125				175			
Power cord		Option (4-core)							
Bucket BL type	Dimensions W×D×H	mm		2132×1130×3667		3028×1230×3922			
		inch		83.9×44.5×144.4		119.2×48.4×154.4			
	Weight	kg		1270±1		1840±2			
Bucket capacity		lb		2800±1		4057±2			
		L		200 (100×2)		260 (130×2)			
		U.S.gallon		52.8 (26.4×2)		68.7 (34.3×2)			
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A							

※1 Self-standing electrical box (120kg/264.5lb) is not included.
※2 Self-standing electrical box (130kg/286.6lb) is not included.



Molded cartridge filter (length:750mm)

VF-2S

24 hour continuous operation.

- Compact
- High static pressure 20 kPa
- Energy Saving

Small high-pressure dust collector



Molded cartridge filter



Strong suction power

Powerful vacuum about 7 times greater than our small-size VF-5N dust collector.



Specifications

Model		VF-2S	
Power supply		3-phase 200V 50/60Hz common use	
		Single-phase 100V (both 50/60Hz) available for special orders	
Output	kW	1.0	
	HP	1.3	
Blower motor		Brushless blower motor	
Max. Airflow	m ³ /min	2.7±0.3 (200V 3-phase)	
	cfm	95±10 (200V 3-phase)	
Max. static pressure [kPa]	m ²	2.5±0.3 (100V single-phase)	
	ft ²	88±10 (100V single-phase)	
Filter	Area	0.67	
	Quantity	7.2	
	Shape/Material	Molded cartridge/ Polyester Spunbond	
	Dust removal	Manual shaking	
Bucket capacity	L	2.2	
	U.S.gallon	0.58	
Recommended breakers [A]		10 (200V 3-phase)	
Power cord	m	2.8 (without plug)	
	inch	110 (without plug)	
Suction port diameter	mm	φ50.8	
	inch	φ2	
Dimensions W×D×H	mm	395×342×399	
	inch	15.6×13.5×15.8	
Weight	kg	26 (3-phase 200V specification)	
	lb	58 (3-phase 200V specification)	
Weight	kg	29 (Single-phase 100V specification)	
	lb	64 (Single-phase 100V specification)	
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A	

Mi/Mi-H

Medium-pressure & medium air flow model.
Simultaneously suctions in suspended particulates,
high-speed dispersed powder, and heavy cutting chip.

Medium pressure dust collector



Molded cartridge filter



Specifications

Model		Mi-204			Mi-306			Mi-508			Mi-202			Mi-304			Mi-506			Mi-302H			Mi-504H		
Pressure at operating point		4.0kPa type									6.0kPa type									10.0kPa type					
Power supply		3-phase 200V 50/60Hz common use									3-phase 200V 50/60Hz common use									3-phase 200V 50/60Hz common use					
Output		1.5			2.2			3.7			1.5			2.2			3.7			2.2			3.7		
	kW HP																								
Airflow	m³/min	0	10.5	14	0	16	21	0	24	28	0	5.5	8.5	0	9	11.5	0	13.5	16	0	4.5	7	0	8	1
	cfm	0	37.0	494	0	565	741	0	847	988	0	194	300	0	317	406	0	476	565	0	158	247	0	282	388
Static pressure	kPa	5.39	3.92	1.96	6.08	3.92	1.96	6.37	3.92	1.96	7.65	5.88	2.94	8.34	5.88	2.94	9.32	5.88	2.94	13.0	9.81	5.88	13.8	9.81	5.88
Area	m²	9.0			13.5			18.0			4.5			9.0			13.5			4.5			9.0		
	ft²	96.8			145.2			193.6			48.4			96.8			145.2			48.4			96.8		
Filter	Quantity	4			6			8			2			4			6			2			4		
	Shape	Molded cartridge									Molded cartridge									Molded cartridge					
	Material	Polyester Spunbond									Polyester Spunbond									Polyester Spunbond					
	Dust removal	Automatic pulse jet (At regular interval)									Automatic pulse jet (At regular interval)									Automatic pulse jet (At regular interval)					
Compressed air consumption [L/min]		17			25			33			9			17			25			9			17		
Diaphragm valve [pcs.]		2			3			4			2			3			3			2			3		
Bucket capacity	L	25			35			25×2			14			25			35			14			25		
Rated capacity	U.S.gallon	6.6			9.2			6.6×2			3.6			6.6			9.2			3.6			6.6		
Compressed breakers		Standard equipment									Standard equipment									Standard equipment					
	m	3 (4-core, without plug)									3 (4-core, without plug)									3 (4-core, without plug)					
Power cord	inch	118 (4-core, without plug)									118 (4-core, without plug)									118 (4-core, without plug)					
Suction port diameter	mm	φ100			φ125			φ150			φ100			φ125			φ100			φ100			φ100		
	inch	φ4			φ5			φ6			φ4			φ5			φ4			φ4			φ4		
Dimensions W×D×H	mm	1200×600×1150			1470×700×1180			1770×700×1180			1000×600×1150			1200×600×1150			1470×700×1180			1000×600×1150			1200×600×1150		
	inch	47.3×23.7×45.3			57.9×27.6×45.6			69.7×27.6×45.6			39.4×23.7×45.3			47.3×23.7×45.3			57.9×27.6×45.6			39.4×23.7×45.3			47.3×23.7×45.3		
Weight	kg	270			340			420			240			280			350			250			290		
	lb	596			750			927			530			618			772			552			640		
Paint color		JPMA (Japan Paint Manufacturing Association) J11-B33									JPMA (Japan Paint Manufacturing Association) J11-B33									JPMA (Japan Paint Manufacturing Association) J11-B33					

IP/IX/IB

Handles ranging from common powder to toner.
Layout-free model has a separate filter unit and blower unit.

IP

Molded filter

Pulse jet

General dry dust

6 m/min

Max. airflow

IX

Resin filter

Pulse jet

Fine powder

6 m/min

Max. airflow



Standard filter (Polyester)



Resin filter (Polyethylene)

Filter Unit Specifications

Model		IP-3	IP-3D	IX-3	IX-3D	IP-5	IP-5D	IX-5	IX-5D
Power supply		3-phase 200V 50/60Hz common use							
Filter	Area	m ²	3.5		3.2		4.7		4.8
	Area	ft ²	37.6		34.4		50.5		51.6
	Quantity		3		27		3		27
	Shape		Molded cartridge						
	Material		Polyester	polyethylene	Polyester	polyethylene			
Dust removal		Automatic pulse jet (At fixed interval)							
Diaphragm valve [pcs.]		3							
Compressed air consumption [L/min]		5.4~15.0	8.5~30.0		5.4~15.0	8.5~30.0			
Suction port diameter	mm	φ50.8				φ63.5			
	inch	φ2				φ2.5			
Exhaust port diameter	mm	φ76.3							
	inch	φ3							
Method of standard discharge		Bucket tank	Discharge valve		Bucket tank	Discharge valve			
Bucket capacity	L	30	—		30	—			
	U.S.gallon	7.9	—		7.9	—			
Dimensions	mm	W	653	881	651	879	653	881	651
		D	658	658	654	654	658	658	654
		H	1409	1537	1568	1696	1609	1737	1768
	inch	W	25.8	34.7	25.7	34.7	25.8	34.7	25.7
		D	26.0	26.0	25.8	25.8	26.0	26.0	25.8
		H	55.5	60.6	61.8	66.8	63.4	68.4	69.7
Weight	kg	65	83	65	83	70	88	70	
	lb	144	184	144	184	155	195	155	
Paint color		JPMA (Japan Paint Manufacturing Association) (Body F35-85A, Top/Bottom YN40)							

Blower Unit Specifications

Model		IB-3	IB-4	IB-5	IB-3D	IB-5D
		Standard motor type (with inverter)				Explosion-proof sealed motor type (without inverter)
Power supply		3-phase 200V 50/60Hz common use				Frequency 50Hz or 60Hz at 3-phase 200V
Output	kW	1.5	3.7	5.5	2.2	5.5
	HP	2	4	7.3	3	7.3
Airflow	m ³ /min	0	3	0	4	5
	cfm	0	105	0	141	176
Static pressure [kPa]	mm	13	12.5	23.5	21	18.5
	inch	0	105	0	176	211
Suction port diameter	mm		φ76.3			
	inch		φ3			
Exhaust port diameter	mm		—			
	inch		—			
Recommended breaker [A]		15	30	50	20	50
Power cord		Option (4-core)				Option (4-core)
Accessories		Hose 1 meter (specify length)				Hose 1 meter (specify length)
Dimensions	mm	W	700	700	700	600
		D	500	500	500	430
		H	608	850	850	776
	inch	W	27.6	27.6	27.6	23.7
		D	19.7	19.7	19.7	17.0
		H	24.0	33.5	33.5	30.6
Weight	kg	90	130	155	105	187
	lb	199	287	342	232	413
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A				JPMA (Japan Paint Manufacturing Association) F35-85A



SP

Easy filter installation and removal by lever operation.
Excellent internal cleansing in main unit.

Water-washable filters available



※HEPA filter box, casters, suction straight inlet pipe available as options.

All-stainless steel body dust collector

Woven filter

Manual shaking

General dry dust

55 m/min

Max. airflow

Premium efficiency motor



Woven plate filter



Specifications

Model		SP-15				SP-30				SP-45				SP-60			
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V															
Output	kW	0.75				1.5				2.2				3.7			
	HP	1				2				3				5			
Airflow	m³/min	0	7.5	12.0	0	15.0	28.0	0	22.0	40.0	0	30.0	55.0				
	cfm	0	264	423	0	529	988	0	776	1412	0	1059	1942				
Static pressure [kPa]		2.45	1.70	0.69	2.55	2.26	1.27	2.55	2.35	1.37	2.90	2.55	1.22				
Filter	Area	m²	4.5				9.0				13.5				18.0		
		ft²	48.4				96.8				145.2				193.6		
	Quantity	1 (holds 10 pieces)				2 (holds 20 pieces)				3 (holds 30 pieces)				4 (holds 40 pieces)			
	Shape/Material	Woven plate/polyester (water-washable)															
	Dust removal	Manual shaking															
Material (body/fan)		SUS304/aluminum						SUS304/iron									
Bucket capacity	L	21				21				21×2				21×2			
	U.S.gallon	5.5				5.5				5.5×2				5.5×2			
Recommended breakers [A]		10				15				20				30			
Power cord	m	2.8 (4-core, without plug)															
	inch	110 (4-core, without plug)															
Suction port diameter	mm	Φ127				Φ150				Φ200				Φ200			
	inch	Φ5				Φ6				Φ8				Φ8			
Dimensions W×D×H	mm	Standard type	400×650×1207				650×650×1469				850×650×1497				1180×650×1660		
		HEPA filter type	400×650×1500				650×650×1740				850×650×1808				1180×650×1981		
	inch	Standard type	15.8×25.6×47.6				25.6×25.6×57.9				33.5×25.6×59.0				46.5×25.6×65.4		
		HEPA filter type	15.8×25.6×59.1				25.6×25.6×68.6				33.5×25.6×71.2				46.5×25.6×78.0		
Weight	kg	92				145				185				250			
	lb	203				320				408				552			

FP-N

Water washable filter box interior.
Hygienic design helps prevent dust from accumulating on the inside of a dust collector.

Standard filter type

Molded filter

Pulse jet

General dry dust

10 m/min

Max. airflow

Resin filter type

Resin filter

Pulse jet

Fine powder

8 m/min

Max. airflow

Specifications

Model		FP-5N						FP-10N						
Filter type		Standard filter			Resin filter			Standard filter			Resin filter			
Power supply		3-phase 200V 50/60Hz common use												
Output	kW	1.5						2.2						
	HP	2						3						
Airflow	m³/min	0	5.0	8.0	0	3.2	6.0	0	8.0	10.0	0	6.5	8.0	
	cfm	0	176	282	0	113	211	0	282	353	0	229	282	
Static pressure [kPa]		8.5	5.5	3.2	8.5	6.1	3.1	8.5	5.5	3.4	8.5	5.6	4.2	
Filter	m²		4.5			2.6			4.5			5.2		
	ft²		48.4			27.9			48.4			55.9		
	Quantity		2			4			2			8		
	Shape		Molded cartridge											
	Material		Polyester Spunbond			Polyethylene			Polyester Spunbond			Polyethylene		
Dust removal		Auto pulse jet (fixed gap [pressure differential detector as an option])												
Compressed air consumption [L/min]		20						30						
Diaphragm valve [pcs.]		2												
Exterior finish		All SUS electrolytic grinding finish												
Bucket capacity	L	20												
	U.S.gallon	5.2						37						
Recommended breakers [A]		15						20						
Power cord		Option (4-core)												
Suction port diameter	mm	φ100												
	inch	φ4												
Dimensions W×D×H	mm	617×966×1488			617×966×1472			617×966×1488			753×1071×1473			
	inch	24.3×38.1×58.6			24.3×38.1×58			24.3×38.1×58.6			29.7×42.2×58			
Weight	kg	190			195			200			230			
	lb	419			430			441			508			



Standard filter (Polyester)



Resin filter (Polyethylene)



FPV-2S

Easily-washable high-pressure vacuum unit.

High static pressure 20 kPa

All-stainless steel body small-size high-pressure dust collector

Molded filter

Resin filter

Pulse jet

Fine powder

2.7 m/min

Max. airflow



Resin filter (Polyethylene)



Molded cartridge filter

Filter Unit Specifications

Power supply		3-phase 200V 50/60Hz common use	
Filter	Area	m ²	1.07
		ft ²	11.5
	Quantity		9
	Shape		Molded cartridge
	Material		Polyethylene
Dust removal		Manual pulse jet ※	
Bucket capacity	L	14	
	U.S.gallon	3.6	
Suction port diameter		IDF standard ferrule 2S	
Exhaust port diameter		IDF standard ferrule 2S	
Dimensions W×D×H	mm	550×514×892	
	inch	21.7×20.3×35.2	
Material surface treatment		SUS304 equiv. inner/outersurface buff#400	

※Compressed air is fed by ball valve (manual). Exhaust of air-blow is a condition for backwash.

FCN

Welding work dust collector with fire control function.

- Smoke sensor
- Spark sensor
- Pre-dust box

Molded filter

Pulse jet

Fumes

45
m³/min

IE3

Premium efficiency motor



Specifications											
Model		FCN-30			FCN-45			FCN-60			
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V									
Output		kW	1.5			2.2			3.7		
		HP	2			3			5		
Airflow		m³/min	0	12	18	0	20	30	0	30	45
		cfm	0	423	635	0	706	1059	0	1059	1589
Static pressure [kPa]			2.55	1.72	0.75	2.55	2.22	1.30	2.84	2.20	1.00
Filter	Area	m²	27.0			40.5			60.8		
		ft²	290.5			435.7			654.2		
	Quantity	4			6			9			
	Shape	Molded cartridge (length:750mm, 132-ridge φ200 cylinder type)									
	Material	Polyester Spunbond									
Dust removal		Automatic pulse jet (At fixed interval)									
Diaphragm valve [pcs.]		2			3			3			
Compressed air consumption [L/min]		20			30			40			
Bucket capacity	L	Bottom part of separation box			16			30			
		Bottom part of dust collector			25			18×2			
	U.S.galon	Bottom part of separation box			4.2			7.9			
		Bottom part of dust collector			6.6			4.7×2			
Recommended breakers [A]		15			20			30			
Power cord		m	3 (4-core, without plug)								
		inch	118 (4-core, without plug)								
Suction port diameter		mm	φ150			φ200			φ250		
		inch	φ6			φ8			φ10		
Dimensions W×D×H		mm	998×651×1817			1268×660×1827			1358×840×1897		
		inch	39.3×25.7×71.6			50.0×26.0×72.0			53.5×33.1×74.7		
Weight		kg	245			305			430		
		lb	541			673			949		
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833									

FD-10

Dust collector for welding work.

- Swing arm
- Caster
- Fire extinguishing mechanism

Molded filter

Manual shaking

Fumes

9
m³/min

IE3

Premium efficiency motor

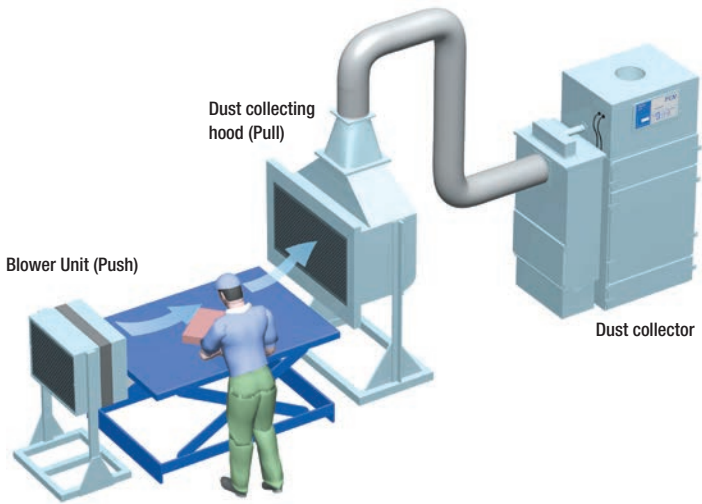


Specifications		FD-10	
Model		FD-10	
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V	
Output	kW	0.75	
	HP	1	
Max. airflow	m³/min	9.0	
	cfm	317	
Max. static pressure [kPa]		2.5	
Filter	Area	20.0	
	ft²	215.2	
	Quantity	2	
	Shape/Material	Molded cartridge / nanofiber	
	Dust removal	Manual shaking	
Suction port diameter	mm	φ160	
	inch	φ6.3	
Recommended breakers [A]		10	
Power cord	m	5 (4-core, without plug)	
	inch	196 (4-core, without plug)	
Dimensions	mm	710×868×985	
	inch	28.0×34.2×38.8	
Weight	kg	152	
	lb	336	
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833	

HF

Push pull dust collecting system.

Energy Saving and Compact type



Specifications				HF-45		HF-60		HF-75		HF-150	
Model				3-phase 200V 50/60Hz common use							
Blower Unit	Power supply										
	Output	kW		0.15	0.2		0.2		0.75		
		HP		0.2	0.26		0.26		1		
	Effective outlet area	m ²		0.22	0.33		0.60		1.20		
		ft ²		2.3	3.5		6.4		12.9		
	Size of supply opening	mm		474×474	574×574		574×1044		1044×1154		
		inch		18.7×18.7	22.6×22.6		22.6×41.2		41.2×45.5		
	Range of injection velocity [m/s] [50/60Hz]			0.5~2.1/2.5	0.5~2.3/2.8		0.5~1.6/1.9		0.5~1.9/2.2		
	Range of injection airflow [50/60Hz]	m ³ /min		6.7~28.3/33.7	9.9~45.5/55.4		18.0~57.5/68.3		36.1~137.3/159.0		
		cfm		236~999/1190	349~1606/1956		635~2030/2411		1274~4848/5615		
Weight	kg		61	76		126		221			
	lb		135	168		278		488			
Paint color				JPMA (Japan Paint Manufacturing Association) J11-833							
Dust collecting hood	Effective suction area	m ²		0.32	0.45		0.78		1.74		
		ft ²		3.4	4.8		8.3		18.7		
	Size of suction opening	mm		570×570	690×690		690×1140		1254×1386		
		inch		22.5×22.5	27.2×27.2		27.2×44.9		49.4×54.6		
	Dust collection airflow	m ³ /min		63	91		163		367		
		cfm		2224	3213		5756		12960		
	Weight	kg		70	95		175		250		
lb			155	210		386		552			
Paint color				JPMA (Japan Paint Manufacturing Association) J11-833							

VF-5HG

The “Ace” among laser marking dust collectors.
Long filter life by fixed regulation of auto air flow (capacity).

With deodorizing function

Automatic air flow control

Electret filter

Fumes

3
m³/min

Max. airflow

Electret filter

Activated carbon box



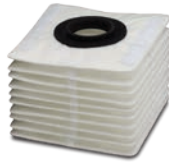
Specifications			VF-5HG			
Model			VF-5HG			
Power supply			3-phase 200V		single-phase 100V	
			50/60Hz common use			
Output		kW		0.875		
		HP		1.1		
Blower motor			Brushless blower motor			
Max. airflow		m³/min		2.8±0.3		
		cfm		98±10		
Max. static pressure [kPa]			20±3.0		17±2.3	
Filter	Filtration method		Internal surface filtration			
	Area	m²		2.3		
		ft²		24.7		
	Internal volume	L		Approximately 15		
		U.S.gallon		Approximately 3.9		
Quantity		1				
Material		electret nonwoven fabric				
Deodorant			Activated carbon [20L(8.4kg)]			
Recommended breakers [A]			10		15	
Power cord		m		2.8 (without plug)		
		inch		110 (without plug)		
Suction port diameter		mm		Option (uses φ38,φ50,φ65)		
		inch		Option (uses φ1.5,φ2.0,φ2.6)		
Dimensions W×D×H		mm		440×488×798		
		inch		17.4×19.3×31.5		
Weight		kg		78		
		lb		172		
External plate material			Iron structure : finish coating JPMA (Japan Paint Manufacturing Association) F35-85A Stainless steel: hairline finish			
Operation control			Auto constant air flow control (adjustable range 0.4 to 2.2 m³/min)			

VF-5HN

Laser marker dedicated dust collector (with deodorizing function)

Low-cost laser marker dust collector.

With deodorizing function



Electret filter



Activated carbon box



Electret filter



Fumes



3.6 m³/min Max. airflow



Specifications

Model		VF-5HN	
Power supply		3-phase 200V	single-phase 100V
		Frequency 50Hz or 60Hz	
Output	kW	0.4	
	HP	0.5	
Max. airflow	m³/min	3.6±0.2	
	cfm	127±10	
Max. static pressure [kPa]		2.65	
Filter	Filtration method	Internal surface filtration	
	Area	m²	2.3
		ft²	24.7
	Internal volume	L	15
		U.S.gallon	3.9
	Quantity	1	
Material	Electret nonwoven fabric		
Deodorant		Activated carbon [20L(10kg)]	
Recommended breakers [A]		5	15
Power cord	m	2.3 (with plug)	
	inch	90 (with plug)	
Suction port diameter	mm	Option (uses $\phi 65, \phi 75, \phi 100$)	
	inch	Option (uses $\phi 2.6, \phi 3.0, \phi 4.0$)	
Dimensions W×D×H	mm	400×400×779	
	inch	15.8×15.8×30.7	
Weight	kg	53	
	lb	117	
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A	

VF-5H

Laser marker dedicated dust collector (with deodorizing function)

Zeolite precoating function delivers stable collection of fumes that tend to adhere to surfaces of filter.

With deodorizing function



Molded cartridge filter



Powdered Filter aid (ZEOPOWER)



Molded filter



Automatic shaking



Fumes



1.6 m³/min Max. airflow



Specifications

Model		VF-5H	
Power supply		Frequency 50Hz or 60Hz at single-phase 100V	
Output	kW	0.4	
	HP	0.5	
	m³/min	1.6	
Max. airflow	cfm	56	
		2.5	
Max. static pressure [kPa]		1.6	
Filter	Area	m²	17.2
		ft²	1
	Quantity	1	
	Shape/Material	Molded cartridge / Polyester Spunbond	
	Dust removal	Automatic shaking	
Deodorant		Activated carbon (10kg)	
Filter aid [ZEOPOWER]	kg	1.6	
	lb	3.6	
Bucket capacity	L	3	
	U.S.gallon	0.8	
Recommended breakers [A]		15	
Power cord [m]	m	2.3 (2-core, with plug)	
	inch	90 (2-core, with plug)	
Suction port diameter	mm	$\phi 50$	
	inch	$\phi 2$	
Dimensions W×D×H	mm	380×500×846	
	inch	15.0×19.7×33.4	
Weight	kg	66.8	
	lb	148	
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833	

PIH

Laser marking dust collector

Zeolite precoating function delivers stable collection of fumes that tend to adhere to surfaces of filter.

With deodorizing function



Molded cartridge filter



Activated carbon unit



Zeo-power upward agitation

Specifications

Model		PIH-30				PIH-60		
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V						
Output	kW	1.5				3.7		
	HP	2				5		
Airflow	m³/min	0	10	13	0	20	26	
	cfm	0	353	459	0	706	918	
Static pressure [kPa]		2.74	1.07	0.49	2.84	1.18	0.49	
Filter	Area	9.0				18.0		
	m²	96.8				193.6		
	ft²	4				8		
	Quantity	Molded cartridge / Polyester Spunbond						
	Shape/Material	Automatic pulse jet (At fixed interval)						
Dust removal		Pulse: 20L /min Pulse: 40L /min						
Compressed air consumption		Pulse: 20L /min				Pulse: 40L /min		
Pulse: Dust removal		Flash: 150L /min				Flash: 300L /min		
Flushing: ZEOPOWER								
Entrainment								
Filter aid	kg	6.0 (ZEOPOWER)				12.0 (ZEOPOWER)		
	lb	13.3 (ZEOPOWER)				26.5 (ZEOPOWER)		
Deodorant [12kg/one unit]		Approx. 36kg (Activated carbon)				Approx. 72kg (Activated carbon)		
Bucket capacity	L	25				25×2		
	U.S.gallon	6.6				6.6×2		
Recommended breakers [A]		15				30		
Power cord	m	3 (4-core, without plug)						
	inch	118 (4-core, without plug)						
Suction port diameter	mm	φ125				φ200		
	inch	φ5				φ8		
Dimensions W×D×H	mm	650×650×2043				1100×700×2198		
	inch	25.6×25.6×80.5				43.4×27.6×86.6		
Weight	kg	195				360		
	lb	430				794		
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833						

SS-N

Wet type dust collector (Scrubber)

Scrubber for combustible dust. Wet type dust collector.

Scrubber



Raschig ring



Collection unit



Scrubber



Inflammable dust



70 m³/min Max. airflow



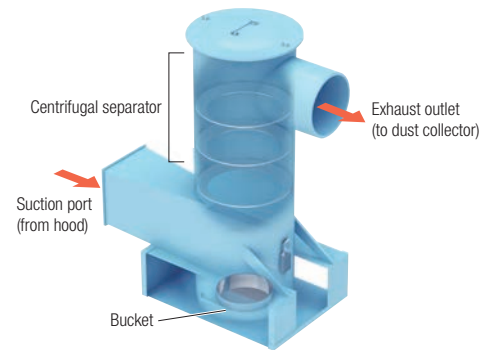
IE3 Premium efficiency motor

Specifications

Model		SS-30N	SS-40N	SS-60N	SS-75N
Power supply		3-phase 200V 50/60Hz common use			
Output	kW	3.7		5.5	
	HP	5		7.3	
Airflow	m³/min	30	40	50	70
	cfm	1059	1412	1765	2472
Static pressure [kPa]		3.0			
Filler	Type	Rashig ring (porcelain)			
	Size	φ10×10×thickness 2mm			
	Specific surface area	650			
	m²	6994			
	ft²				
Filling capacity	L	225	300	360	495
	U.S.gallon	59.5	79.3	95.2	130.8
Suction /Exhaust port	mm	φ200/φ200	φ250/φ250	φ300/φ300	φ350/φ350
	inch	φ8/φ8	φ10/φ10	φ12/φ12	φ14/φ14
Circulation tank	L	330	420	510	670
	U.S.gallon	87.1	111.0	134.7	177.0
Demister	mm	1pc. (515×780)	2pcs. (370×780)	2pcs. (515×780)	2pcs. (615×780)
	inch	1pc. (20.3×30.8)	2pcs. (14.7×30.8)	2pcs. (20.3×30.8)	2pcs. (24.3×30.8)
Nozzle		4 pcs./10A	6 pcs./10A	8 pcs./10A	10 pcs./10A
Circulating pump	Recirculating water quantity [L/min]	30	50	75	90
	Output	0.18		0.25	
		0.2		0.3	
Water supply		Water line 0.15MPa or higher/ball-tap (with manual ball valve 15A)			
Maximum inlet dust concentration/ maximum suction temperature		300mg/m³ / 40°C or less			
Recommended Breaker		Standard equipment			
Power cord		Option (4-core)			
Dimensions W×D×H	mm	1445×1000×2480	1745×1000×2480	1995×1000×2480	2520×1000×2580
	inch	56.9×39.4×97.7	68.8×39.4×97.7	78.6×39.4×97.7	99.3×39.4×101.6
Weight [Not including water]	kg	610	760	880	1180
	lb	1345	1676	1941	2602

DB

Reduce entering fire inside dust collector.
Prevent from a fire accident

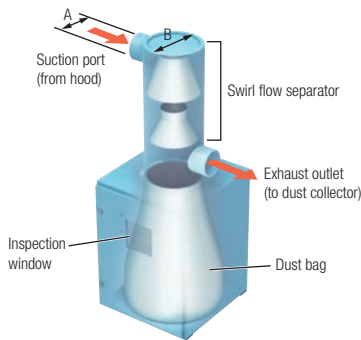


Specifications

Model		DB-10	DB-20	DB-30	DB-40
Applicable airflow	m³/min	10	20	30	40
	cfm	353.1	706.2	1059.4	1412.5
Pressure loss		490Pa at 7.5m³/min	490Pa at 15m³/min	539Pa at 22.5m³/min	588Pa at 30m³/min
Minimum working airflow	m³/min	3.5	7.0	11.0	15.0
	cfm	123.6	247.2	388.4	529.7
Dimensions W×D×H	mm	465×309×647	550×405×938	700×501×1149	850×590×1372
	inch	18.4×12.2×25.5	21.7×16.0×37.0	27.6×19.8×45.3	33.5×23.3×54.1
Corresponding models		VNA-15,PIF-15	VNA-30,PIF-30	VNA-45,PIF-45	VNA-60,PIF-60
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833			

SR

Amano's unique in-house cyclone
Lengthens life of dust collector filter



Specifications

Model		SR-65	SR-100	SR-125
φA	mm	63.5	100	127
	inch	2.5	4	5
φB	mm	127	200	254
	inch	5	8	10
Dimensions W×D×H	mm	400×402×879	400×402×1044	600×602×1485
	inch	15.8×15.9×34.7	15.8×15.9×41.1	23.7×23.8×58.5
Applicable airflow	m³/min	2~4	4.5~9	7.5~12
	cfm	70~141	158~317	264~423
Corresponding models		VF-5N	IS-15	VNA,PIF-15
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833		

Model		SR-150	SR-200	SR-250
φA	mm	150	200	250
	inch	6	8	10
φB	mm	300	400	500
	inch	12	16	20
Dimensions W×D×H	mm	600×602×1595	900×905×2063	900×905×2302
	inch	23.7×23.8×62.8	35.5×35.7×81.3	35.5×35.7×90.7
Applicable airflow	m³/min	10~20	17.5~35	30~50
	cfm	353~706	618~1236	1059~1765
Corresponding models		VNA,PIF-30	VNA,PIF-45	VNA,PIF-60
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833		

Model		SR-300	SR-380
φA	mm	300	380
	inch	12	15
φB	mm	600	760
	inch	24	30
Dimensions W×D×H	mm	1200×1203×3039	1200×1203×3419
	inch	47.3×47.4×119.7	47.3×47.4×134.7
Applicable airflow	m³/min	40~80	60~120
	cfm	1412~2825	2118~4237
Corresponding models		PIF-75/120,VNA-120	PIF-150
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833	

V-Σ

Factory vacuum cleaner unit Proven Bestseller!
Incredible power and durability!



Specifications

Model		V-2Σ	V-3Σ	V-5Σ	V-7Σ
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V			
Output	kW	1.5	2.2	3.7	5.5
	HP	2	3	5	7.3
Airflow	m³/min	0	2.0	4.2	6.0
	cfm	0	70	148	211
Static pressure	kPa	9.81	9.32	5.39	2.6
	mmHg	73.8	70.0	40.5	19.5
Filter	Molded	Area m²	21.5	27.9	27.9
		Quantity	1	1	1
	Woven	Dust removal	Automatic shaking / Manual shaking		
		Area m²	0.7	1.2	1.2
		Quantity	7.5	12.9	12.9
		Dust removal	Manual shaking		
Bucket capacity	L	27	60	60	60
	U.S.gallon	7.1	15.8	15.8	15.8
Recommended breakers [A]	m	15	20	30	50
	inch	15	20	30	50
Power cord	inch	10 (4-core, with plug)			
	mm	393 (4-core, with plug)			
Suction port diameter	mm	φ38.1			
	inch	φ1.5			
Dimensions W×D×H	mm	380×908×925	480×1252×1020	480×1252×1020	480×1252×1020
	inch	15.0×35.8×36.5	18.9×49.3×40.2	18.9×49.3×40.2	18.9×49.3×40.2
Weight	kg	100	110	195	220
	lb	221	243	430	486
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833			



Suctions up metal fragments & cutting chips
Collect metal and cutting scraps with stable suction force.
Also functions as vacuum source for factories producing precision components

IPR/IXR

Internal pulse jet & compressor.
Top of the line among industrial vacuums.



IPR



Specifications

Model		IPR-3	IXR-3	IPR-4	IXR-4	IPR-5	IXR-5
Power supply		3-phase 200V 50/60Hz common use					
Control method		Inverter drive (6 step speed change operation)					
Output	kW	1.5	3.7	5.5	5.5	5.5	5.5
	HP	2	5	7.3	7.3	7.3	7.3
Max. airflow	m³/min	3.0	5.0	6.0	6.0	6.0	6.0
	cfm	105	176	211	211	211	211
Max. static pressure [kPa]		13.0	23.5	27.0	27.0	27.0	27.0
	mmHg	97.5	176.3	202.5	202.5	202.5	202.5
Filter	Area m²	37.6	34.4	50.5	51.6	50.5	51.6
	ft²	407.5	371.5	544.5	555.5	544.5	555.5
	Quantity	1	1	1	1	1	1
	Dust removal	Automatic pulse jet (At fixed interval)					
Diaphragm valve [pcs.]		3					
Bucket capacity	L	30	30	30	30	30	30
	U.S.gallon	7.9	7.9	7.9	7.9	7.9	7.9
Recommended breakers		Standard equipment					
Power cord	m	3.5 (4-core, without plug)					
	inch	137 (4-core, without plug)					
Suction port diameter	mm	φ50.8	φ63.5	φ63.5	φ63.5	φ63.5	φ63.5
	inch	φ2	φ2.5	φ2.5	φ2.5	φ2.5	φ2.5
Dimensions W×D×H	mm	1254×622×1258	1254×622×1458	1254×622×1458	1254×622×1458	1254×622×1458	1254×622×1458
	inch	49.4×24.5×49.6	49.4×24.5×57.5	49.4×24.5×57.5	49.4×24.5×57.5	49.4×24.5×57.5	49.4×24.5×57.5
Weight	kg	195	200	240	250	265	275
	lb	430	441	530	552	585	607
Internal compressor operating control		3-phase 200V 0.2kW 50/60Hz common use					
Paint color		JPMA (Japan Paint Manufacturing Association) F35-85A (roof & bucket unit: YN40)					

ACR-PK

Compact central cleaning suction source.



ACR-10PK



Molded cartridge filter



Paint color JPMA (Japan Paint Manufacturing Association) 634

See page 32 of specification table

V-SDR

For use with explosive or inflammable powder such as aluminum dust.
Fullfilling safety measures.

For metals

Effect on Kst value
200-160
(3SDR) (7SDR)



Molded cartridge filter
(Anti-electrostatic filter)



Dust explosion pressure diffusion type industrial vacuum cleaner

Molded filter

Manual shaking

Inflammable powder/
dust that might explode

5.7
m³/min

Max. airflow

Specifications

Model		V-3SDR				V-7SDR		
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V						
Output		kW	2.2			5.5		
		HP	3			7.3		
Airflow		m³/min	0	2.4	4.8	0	2.7	5.7
		cfm	0	84	169	0	95	201
Static pressure [kPa]		12.4	10.9	7.9	22.6	19.7	9.7	
Filter	Area	m²		2.0		2.6		
		ft²		21.5		27.9		
	Quantity	1						
	Shape	Molded cartridge (Anti-electrostatic filter)						
Dust removal		Manual shaking						
Bucket capacity		L	27			60		
		U.S.gallon	7.1			15.8		
Recommended breakers [A]		20			50			
Power cord		m	15 (4-core, without plug)					
		inch	590 (4-core, without plug)					
Suction port diameter		mm	φ38.1					
		inch	φ1.5					
Dimensions W×D×H		mm	496×1089×1052			621×1397×1194		
		inch	19.6×42.9×41.5			24.5×55.0×47.1		
Weight		kg	141			250		
		lb	311			552		
Paint color		JPMA (Japan Paint Manufacturing Association) S11-344						

1. For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN or D.
2. In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN or D.

VF-2LD

For explosive & inflammable dust other than metal such as toner.
Fullfilling safety measures.

For toner

Effect on Kst value 300

Explosion test Our inhouse explosion test photos.



Molded filter

Manual shaking

Inflammable powder/
dust that might explode

2.7
m³/min

Max. airflow

Specifications

※Suction brushes, rods, hoses are sold separately.

Model		VF-2LD	
Power supply		3-phase 200V	single-phase 100V
		Frequency 50Hz or 60Hz	
Output	kW	1.0	
	HP	1.3	
Airflow	m³/min	2.7±0.3	2.5±0.3
	cfm	95±10	88±10
Static pressure [kPa]		20.0±3.0	17.0±2.3
	m²	2.2	
Filter	ft²	23.6	
	Quantity	1	
Shape		Molded cartridge (dedicated toner fine-fil static charge)	
	Dust removal	Manual shaking	
Bucket capacity	L	13	
	U.S.gallon	3.4	
Recommended breakers [A]		10	15
Power cord	m	10.3 (4-core, without plug)	10.3 (3-core, with plug)
	inch	405 (4-core, without plug)	405 (3-core, with plug)
Suction port diameter	mm	φ38	
	inch	φ1.5	
Dimensions W×D×H	mm	430×895×1500	
	inch	17.0×35.3×59.1	
Weight	kg	107	110
	lb	236	243
Paint color		JPMA (Japan Paint Manufacturing Association) S11-344	



Molded cartridge filter
(dedicated toner Fine-fil static charge)



EM-8eII

Powerful collection of highly concentrated mist up to 100mg/m³
Compact electric collection type mist collectors.
Operational for both oil and water soluble mist

Compact



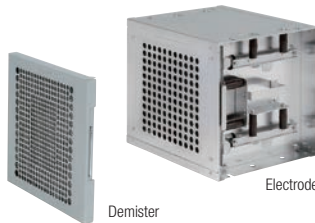
Electrostatic precipitator mist collector

Electrical

Mist

7.5
m³/min

Max. airflow



Demister

Electrode

Specifications

Model		EM-8eII	
Power supply		Single phase 200V 50/60Hz common use	
Output	kW	0.12	
	HP	0.16	
Usage Point	m³/min	50Hz	7.5 (7.5)
		60Hz	7.5 (7.5)
Airflow	cfm	50Hz	264 (264)
		60Hz	264 (264)
Usage point static pressure [Pa]		50Hz	50 (900)
		60Hz	50 (900)
Prefilter		Stainless steel wire demister	
Electric collection part	Electric charge method	(-) negative charge, 2-stage charging system	
	Charging electrode type	Needle type (nickel alloy)	
	Electrode charging voltage HV [kV]	-8	
	Collecting electrode voltage LV [kV]	-6	
Objects for collection		Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°C or more	
Collecting efficiency [%]		Water-soluble mist with electric conductivity of 300mS/m or less	
Maximum inlet concentration [mg/m³]		99 (Weight ratio per filter paper) Depending on suction air volume	
Recommended breakers [A]		100	
Power cord	m	3.5 (3-core, without plug)	
	inch	137 (3-core, without plug)	
Drainage port		1-inch nipple (taper male screw for R1 pipe)	
Dimensions W×D×H	mm	430×535×400	
	inch	16.9×21.0×15.7	
Weight	kg	29	
	lb	64	
Paint color		JPMA(Japan Paint Manufacturing Association) F35-85A	

EM-eII

Powerful collection of highly concentrated mist up to 200mg/m³
Bestseller among electric collection Mist Collectors
Operational for both oil and water soluble mist



Electrostatic precipitator mist collector

Electrical

Mist

30
m³/min

IE3

Premium efficiency motor



Collecting electrode

Charging electrode

Demister

Specifications

Model		EM-15eII		EM-30eII	
Power supply		3-phase 200V 50/60Hz common use			
Output		kW	0.75	1.5	
		HP	1	2	
Usage Point	m³/min	50Hz	15 (19)	30 (34)	
		60Hz	15 (22)	30 (40)	
Airflow	cfm	*Figure in () is maximum value	529 (670)	1059 (1200)	
		60Hz	529 (776)	1059 (1412)	
Usage point static pressure [Pa]	*Figure in () is maximum value	50Hz	350 (550)	280 (450)	
		60Hz	600 (750)	500 (600)	
Prefilter		Stainless steel wire demister			
Electric collection part	Electric charge method		(-) negative charge, 2-stage charging system		
	Charging electrode type		Needle type (titanium)		
	Electrode charging voltage HV [kV]		-10		
	Collecting electrode voltage LV [kV]		-6		
Objects for collection		Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°C or more			
Collecting efficiency [%]		Water-soluble mist with electric conductivity of 300mS/m or less			
Maximum inlet concentration [mg/m³]		99 (Weight ratio per filter paper) Depending on suction air volume			
Recommended breakers [A]		10		200	
Power cord	m	10		15	
	inch	3.5 (4-core, without plug)			
Drainage port		137 (4-core, without plug)			
Dimensions W×D×H		1-inch nipple (taper male screw for R1 pipe)			
Dimensions W×D×H	mm	478×993×620		813×1093×620	
	inch	18.9×39.1×24.5		32.1×43.1×24.5	
Weight	kg	72		120	
	lb	159		265	
Paint color		JPMA(Japan Paint Manufacturing Association) F35-85A			

EM-SC

Clean electrodes without washing by water or detergent.
Equipped with auto self-cleaning function.
Top of the line in electric collection -mist collectors.

Self-cleaning



Electrostatic precipitator mist collector


Cleaning


Electrical


Mist


Max. airflow


Premium efficiency motor
(except EM-8SC)

Specifications

Model		EM-8SC	EM-15SC	EM-30SC
Power supply		3-phase 200V 50/60Hz common use		
Output	kW	0.4	0.75	1.5
	HP	0.5	1	2
Max. airflow	m³/min	8.0	15.0	30.0
	cfm	282	529	1059
Max. static pressure [Pa]		500		
Pre-processing		Metal eliminator		
Electric collection part	Electric charge method	(+) positive charge, 2-stage charging system		
	Charging electrode type	Needle type (titanium)		
	Electrode charging voltage HV [kV]	10		
	Collecting electrode voltage LV [kV]	8		
	Cleaning method	Cleaning by rotating electrode & stationary scraper		
Objects for collection		Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°C or more Water-soluble mist with electric conductivity of 300mS/m or less		
Collecting efficiency [%]		99 (weight ratio per filter paper)		
Maximum inlet concentration [mg/m³]		200		
Recommended breakers [A]		5	10	15
Power cord	m	3.5 (4-core, without plug)		
	inch	137 (4-core, without plug)		
Drainage port		1-inch nipple (taper male screw for R1 pipe)		
Dimensions W×D×H	mm	707×476×1081	872×476×1086	1310×476×1209
	inch	27.9×18.8×42.6	34.3×18.8×42.8	51.6×18.8×47.6
Weight	kg	84	107	140
	lb	186	236	309
Paint color		JPMA(Japan Paint Manufacturing Association) F35-85A		

※Suction inlet packing comes supplied with optional suction inlet.

EM-eH

Turbofan gives extra power for air flow & static pressure.
Ideal for die casting machines.

Max. air flow
90m³/min



Electrostatic precipitator mist collector


Electrical


Mist


Max. airflow


Premium efficiency motor

Specifications

Model		EM-60eH			EM-90eH		
Power supply		3-phase 200V 50/60Hz common use					
Output	kW	3.7			5.5		
	HP	5.0			7.3		
Airflow	m³/min	0	40	60 (Operating point)	0	60	90 (Operating point)
	cfm	0	1412	2118 (Operating point)	0	2118	3178 (Operating point)
Static pressure [kPa]		2.23	1.50	0.50	2.76	1.70	0.27
Pre-processing	Eliminator	4 pcs.			6 pcs.		
	Demister	2 pcs.			4 pcs.		
Electric collection part	Charging electrode	4 pcs.			6 pcs.		
	Collecting electrode	4 pcs.			6 pcs.		
Safety measure	Fire protection damper	One unit of the FVD type damper (with volume adjuster, temperature fuse, limit switch) is provided as a standard accessory.					
Collecting efficiency [%]		97.5 (weight ratio per filter paper) airflow at operating point					
Maximum inlet concentration [mg/m³]		50					
Recommended breakers		Standard equipment					
Power cord		Option (4-core)					
Drainage port		1-inch single-ended male nipple (with valve and elbow)					
Dimensions W×D×H	mm	905×958×2221			905×1303×2266		
	inch	35.7×37.8×87.5			35.7×51.3×89.2		
Weight	kg	375			550		
	lb	827			1213		
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833					

EM-SCIIIt

Low-priced model for EM-SC
Equipped with auto self-cleaning function only for collecting electrode

Self-Cleaning



Electrostatic precipitator mist collector


Cleaning


Electrical


Mist


Max. airflow


Premium efficiency motor

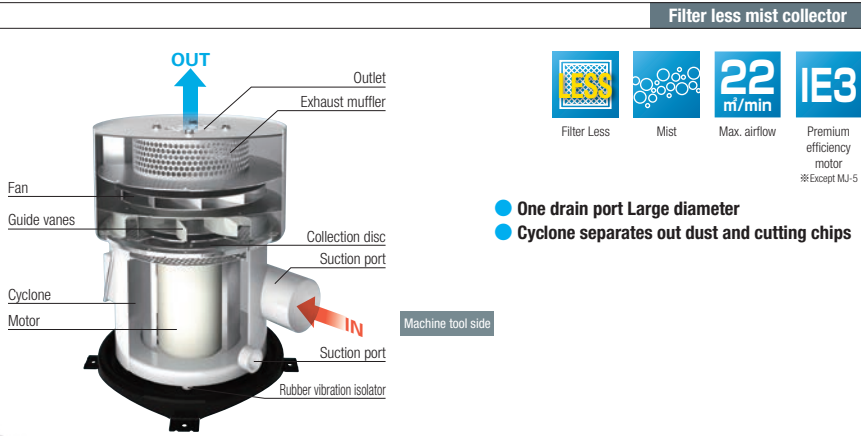
Specifications

Model		EM-15SCIIIt	EM-30SCIIIt
Power supply		3-phase 200V 50/60Hz common use	
Fan motor output	kW	0.75	1.5
	HP	1	2
Electrode cleaning motor output	W	7.0	
	HP	0.009	
Usage point airflow (m³/min) ※Figure in () is min / max value	50Hz	15 (Min 12.5 / Max 19)	30 (Min 25 / Max 34)
	60Hz	15 (Min 12.5 / Max 22)	30 (Min 25 / Max 34)
Usage point static pressure [Pa] ※Figure in () is max value	50Hz	270 (550)	190 (450)
	60Hz	540 (750)	420 (600)
Pre-processing		Metal eliminator	
Electric collection part	Electric charge method	(−) negative charge, 2-stage charging system	
	Charging electrode type	Needle type	
	Electrode charging voltage HV [kV]	10 (7line)	10 (14line)
	Collecting electrode voltage LV [kV]	8 (13line)	8 (26line)
Cleaning method		Cleaning by rotating electrode & stationary scraper	
Objects for collection		Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°C or more Water-soluble mist with electric conductivity of 300mS/m or less	
Collecting efficiency [%]		99 (weight ratio per filter paper)	
Maximum inlet concentration [mg/m³]		200	
Recommended breakers [A]		10	15
Power cord	m	3.5 (4-core, without plug)	
	inch	137 (4-core, without plug)	
Drainage port		1-inch 90° elbow / Hose nipple	
Dimensions W×D×H	mm	500×1234×620	835×1334×620
	inch	19.7×48.6×24.5	32.9×52.6×24.5
Weight	kg	83	128
	lb	183	283
Paint color		JPMA(Japan Paint Manufacturing Association) F35-85A	

※Performance values might change from those shown on custom order specifications.

MJ

No filter replacement needed.
Cyclone and trapping disk provide long term suction intake and trapping performance.



- One drain port Large diameter
- Cyclone separates out dust and cutting chips



Specifications					
Model		MJ-5	MJ-10	MJ-15	MJ-25
Power supply		3-phase 200V 50/60Hz common use			
Output	kW	0.4	0.75	1.5	2.2
	HP	0.5	1	2	3
Max. airflow 50Hz/60Hz	m³/min	3.7/4.5	7.0/8.5	13.0/16.0	18.0/22.0
	cfm	130/158	247/300	459/565	635/776
Max. static pressure [kPa] 50Hz/60Hz		1.0/1.5			
Collecting method		Cyclone + rotary collision method			
Collecting efficiency [%]		99.9 (2.0µm particle water soluble mist)			
Objects for collection		Water soluble mist /Oil mist (after-filter is mounted in case of oil mist suction)			
Maximum inlet concentration [mg/m³]		20			
Recommended breakers [A]		5	10	15	20
Power cord		Option (4-core)			
Suction port diameter	mm	φ98	φ123	φ148	φ198
	inch	φ3.9	φ4.9	φ5.9	φ7.8
Drainage port		1-inch socket			
Dimensions	mm	Max width	429	476	576
		Height	453	507	589
	inch	Max width	16.9	18.8	22.7
		Height	17.9	20.0	23.2
Weight	kg	38	42	63	73
	lb	84	93	139	161
Vibration-suppression function		Rubber vibration isolator (oil-resistant)			
Paint color		JPMA (Japan Paint Manufacturing Association) main unit F35-85A, bottom YN40			

MZ

Energy Saving model
Operation at same air flow but with a motor that is lower notch.



Filter type mist collector



Easy toolless maintenance!

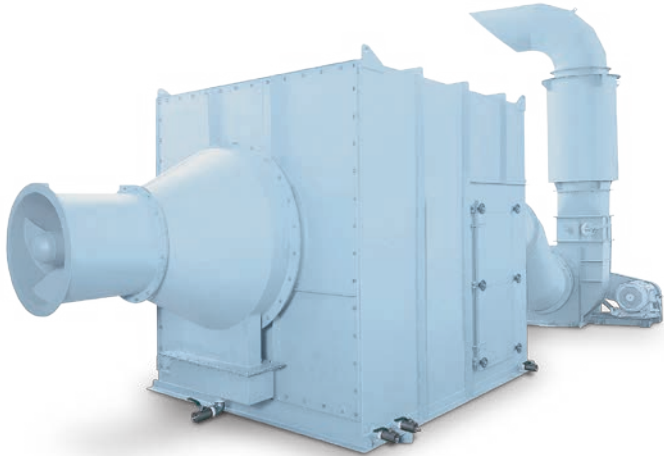
Maintenance is easy even in high positions such as upper parts of machine tools.



Specifications				
Model		MZ-10	MZ-15	MZ-30
Power supply		3-phase 200V 50/60Hz common use		
Output	kW	0.4	0.75	1.5
	HP	0.5	1	2
Max. airflow	m³/min	50Hz	8.3	10.5
		60Hz	10	12.5
	cfm	50Hz	293	370
		60Hz	353	442
Max. static pressure [kPa]	50Hz	0.9	0.9	1.2
	60Hz	1.3	1.3	1.75
Primary filter		Polyester (1 pc. use)		
Secondary filter		Polyester (1 pc. use)		
Collecting efficiency [%]		99.7 and over (2µm and over water soluble mist)		
Objects for collection		Water soluble mist (intake of oily mist after mounting an after-filter available as an option)		
Maximum inlet concentration [mg/m³]		20		
Recommended breakers [A]		5	10	15
Power cord		Option (4-core)		
Suction port diameter	mm	φ123	φ148	φ198
	inch	φ4.9	φ5.9	φ7.8
Drainage port		φ16mm (2 locations) non-thread screws (use for insertion of hose)		
Dimensions W×D×H	mm	306×556×450	356×583×460	407×672×575
	inch	12.1×21.9×17.8	14.1×23.0×18.2	16.1×26.5×22.7
Weight	kg	27	35	60
	lb	60	78	133
Paint color		JPMA (Japan Paint Manufacturing Association) main unit F35-85A, exhaust box U77-60L		

MS

Proprietary swirl flow separator.
Ideal for collection from multiple machine tools.



Large air flow filter type mist collector



Specifications							※ Fan motor is sold separately	
Model		MS-100	MS-150	MS-200	MS-250	MS-350	MS-400	
Applicable capacity		m³/min	100	150	200	250	350	400
		cfm	3531	5297	7062	8828	12360	14125
Primary filter	Dimensions W×H	mm	500×666		800×1000			
		inch	19.7×26.3		31.5×39.4			
	Quantity	16	20	24	32	40	40	
	Material	Sponge + particular fiber						
Secondary filter	Dimensions W×H×D	mm	610×610×290		610×610×290	610×760×290		
		inch	24.1×24.1×11.5		24.1×30.0×11.5			
	Quantity	4		6		9	12	
	Material	Glass wool						
Objects for collection		Water soluble mist/oil mist						
Maximum inlet concentration [mg/m³]		20						
Suction port diameter		mm	φ380	φ470	φ550	φ610	φ720	φ770
		inch	15	18.6	21.7	24.1	28.4	30.4
Dimensions	mm	W	3250	3635	4590	4730	5300	5390
		D	1500	1870	1700	2050	2560	2600
		H	1590	1590	2250	2250	2700	2700
	inch	W	128.0	143.2	180.8	186.3	208.7	212.3
		D	59.1	73.7	67.0	80.8	100.8	102.4
		H	62.6	62.6	88.6	88.6	88.6	106.3
Weight	kg	1200	1600	2200	2400	2900	3500	
	lb	2646	3528	4851	5292	6395	7718	
Drainage port		1-1/2 inch socket [set]		4				
Paint color		2 inch socket [set]		1				
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833						

MC-45

Medium airflow mist collector.



Filter type medium airflow mist collector



Specifications			
Model		MC-45	
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V	
Output	kW	2.2	
	HP	3	
Airflow	m³/min	0	42
	cfm	0	1483
Static pressure [kPa]		2.75	0.49
Primary filter		Metal mesh	
Secondary filter		Urethane sponge	
Objects for collection		Water soluble mist	
Maximum inlet concentration [mg/m³]		20	
Recommended breakers [A]		20	
Power cord		3 (4-core, without plug)	
Suction port diameter		φ200	
Drain port		Equipped with drain valve and drain tank	
Dimensions W×D×H	mm	850×650×1759	
	inch	33.5×25.6×69.3	
Weight	kg	185	
	lb	408	
Paint color		JPMA (Japan Paint Manufacturing Association) J11-833	

VNA-SDN

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Effect on Kst values of 700
※Except 600N



Explosion pressure diffusion port
Pressure from explosion is discharged into air to prevent damage to the equipment.



Extinguisher port
In the unlikely event fire occurs in the equipment, extinguishing agent is dispensed.



Check valve
Prevents reverse flow of blow force or fire to protect the worker.

Dust explosion pressure diffusion type dust collector			
Anti-electrostatic woven filter	Manual shaking	Inflammable powder/dust that might explode	Max. airflow
Premium efficiency motor ※Except VNA-30SDN/45SDN			
IE3			
Model	Kst value (x10 ³ kPa·m/s or less)	Pmax(x10 ³ kPa or less)	
VNA-30SDN	700	11.5	
VNA-45SDN	700	11.5	
VNA-60DN	300	11.0	

Specifications

Model		VNA-30SDN				VNA-45SDN			VNA-60DN			
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V										
Output	kW	1.5				2.2			3.7			
	HP	2				3			5			
Airflow	m³/min	0	15	25		0	20	40		0	30	55
	cfm	0	529	882		0	706	1412		0	1059	1942
Static pressure [kPa]		2.55	1.70	0.52		2.63	1.98	0.48		2.64	2.13	0.65
Filter	Area	9.0				13.5			18.0			
	ft²	96.8				145.2			193.6			
	Quantity	2				3			4			
	Shape	Woven plate (Anti-electrostatic filter)										
Dust removal		Manual shaking										
Bucket capacity	L	22				35			25×2			
	U.S.gallon	5.8				9.2			6.6×2			
Recommended breakers [A]		15				20			30			
Power cord	m	5 (4-core, without plug)										
	inch	196 (4-core, without plug)										
Suction port diameter	mm	φ150							φ200			
	inch	φ6							φ8			
Dimensions W×D×H	mm	1020×1253×1754				1355×1328×1821			1546×1396×2055			
	inch	40.2×49.4×69.1				53.4×52.3×71.7			60.9×55.0×81			
Weight	kg	340				400			460			
	lb	750				882			1015			
Paint color		JPMA (Japan Paint Manufacturing Association) S11-344										

- The dimensions mentioned above are only for the main unit. A check valve, an electrical box, the roof of outdoor specifications are not included.
- A dust explosion-proof motor (motor having structure to prevent the invasion of the outside substance) is installed on VNA-30SDN and VNA-45SDN.
- For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN or D.
- In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN or D.

VN-SD

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Effect on Kst values of 400



Explosion pressure diffusion port
Pressure from explosion is discharged into air to prevent damage to the equipment.



Extinguisher port
In the unlikely event fire occurs in the equipment, extinguishing agent is dispensed.



Check valve
Prevents reverse flow of blow force or fire to protect the worker.

Dust explosion pressure diffusion type dust collector			
Woven filter	Manual shaking	Inflammable powder/dust that might explode	Max. airflow
Model	Kst value (x10 ³ kPa·m/s or less)	Pmax(x10 ³ kPa or less)	
VN-30SD	400	11.5	
VN-45SD	400	11.5	

Specifications

Model		VN-30SD			VN-45SD		
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V					
Output	kW	1.5			2.2		
	HP	2			3		
Airflow	m³/min	0	15	24.5	0	20	35
	cfm	0	529	865	0	706	1236
Static pressure [kPa]		2.84	1.62	0.39	2.75	1.72	0.49
Filter	Area	7.5			10.0		
		80.7			107.6		
	Quantity	3			4		
	Shape	Woven plate (canvas filter plus aluminum sheet with earthing conductor)					
Dust removal		Manual shaking					
Bucket capacity	L	27			38		
	U.S.gallon	7.1			10.0		
Recommended breakers [A]		15			20		
Power cord	m	5 (4-core, without plug)					
	inch	196 (4-core, without plug)					
Suction port diameter	mm	φ150			φ200		
	inch	φ6			φ8		
Dimensions W×D×H	mm	650×850×1656			850×900×1812		
	inch	25.6×33.5×65.2			33.5×35.5×71.4		
Weight	kg	220			280		
	lb	486			618		
Paint color		JPMA (Japan Paint Manufacturing Association) S11-344					

- The dimensions mentioned above are only for the main unit. A check valve, an electrical box, the roof of outdoor specifications are not included.
- A dust explosion-proof motor (motor having structure to prevent the invasion of the outside substance) is installed.
- For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN or D.
- In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN or D.

※Performance values might change from those shown on custom order specifications.

PIE-SDN

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Pulse jet type (By differential pressure detection)

Effect on Kst values of 700
※Except DN



Dust-proof electrical equipment box
Structure is sealed by packing to make dust explosions unlikely to occur.



Check valve
Prevents reverse flow of blow force or fire to protect the worker.



Explosion pressure diffusion port
Pressure from explosion is discharged into air to prevent damage to the equipment.

Molded anti-electrostatic filter	Pulse jet	Inflammable powder/dust that might explode	Max. airflow	Premium efficiency motor ※Except PIE-30SDN/45SDN

Model	Kst value (x10 ³ kPa·m/s or less)	Pmax(x10 ³ kPa or less)
PIE-30SDN	700	11.5
PIE-45SDN	700	11.5
PIE-60DN	300	11.0
PIE-75DN	300	11.0
PIE-120DN	300	11.0
PIE-150DN	300	11.0

Effective area was calculated based on "Explosive pressure discharge device technical guidelines(Revised version)(NIS-TR-No.38(2005))" in incorporated agency industrial safety institute laws. Above figures are for standard equipment. Please have the target dust evaluated for explosion potential (billed to customer).

Specifications

Model			PIE-30SDN		PIE-45SDN		PIE-60DN		PIE-75DN		PIE-120DN		PIE-150DN						
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V																	
Output	kW	1.5		2.2		3.7		5.5		7.5		5.5×2							
	HP	2		3		5		7.3		10		7.3×2							
Airflow	m³/min	0	15	25	0	20	35	0	35	55	0	65	105	0	100	150			
	cfm	0	529	882	0	882	1236	0	1236	1942	0	2295	3708	0	3531	5292			
Static pressure [kPa]		2.72	1.71	0.60	2.72	1.71	0.90	2.73	2.03	0.92	3.10	2.53	0.76	3.20	2.41	0.59	3.10	2.27	0.72
Filter	Area	m²		9.0		13.5		18.0		27.0		36.0		54.0					
	Quantity	ft²		96.8		145.2		193.6		290.5		387.3		581.0					
	Shape	Molded cartridge (Anti-electrostatic filter with grounding conductor)																	
	Dust removal	Automatic pulse jet (B: differential pressure detection) Automatic pulse jet (M: pressure differential detection, J: fixed period)																	
Compressed air consumption [L/min]		17		25		33		46		55		82							
Diaphragm valve [pcs.]		2		3		4		4		4		6							
Recommended breakers [A]		15		20		30		50		60		75							
Power cord	m	5 (4-core, without plug)												—					
	inch	196 (4-core, without plug)												—					
Suction port diameter	mm	φ150		φ200		φ250		φ290		φ290		φ380							
	inch	φ6		φ8		φ10		φ11.5		φ11.5		φ15							
Dimensions W×D×H	mm	854×1438×1850		1075×1488×1907		1160×1244×2144		BL:2211×1073×2615 BS:2211×1073×2298		BL:2285×1464×3300 BS:2285×1464×2896		BL:2765×1544×3683 —							
	inch	33.7×56.7×72.9		42.4×58.6×75.1		45.7×49.0×84.5		BL:87.1×42.3×103 BS:87.1×42.3×90.5		BL:90.5×7.7×130 BS:90.5×7.7×114.1		BL:108.9×60.8×145 —							
		—		—		—		BL:70×1 BS:30×2		BL:60×1 BS:37×2		BL:70×2 —							
		—		—		—		BL:18.4×1 BS:7.9×2		BL:15.8×1 BS:9.7×2		BL:18.4×2 —							
Bucket capacity	L	22		35		25×2		BL:700 BS:650		BL:980 BS:920		BL:1460 —							
	U.S.gallon	5.8		9.2		6.6×2		BL:15.4×1 BS:7.9×2		BL:15.8×1 BS:9.7×2		BL:18.4×2 —							
Weight	kg	370		460		550		BL:700 BS:650		BL:980 BS:920		BL:1460 —							
	lb	816		1015		1213		BL:1544 BS:1433		BL:2161 BS:2029		BL:3219 —							
Paint color		JPMA (Japan Paint Manufacturing Association) S11-344																	

- The dimensions mentioned above are only for the main unit. A check valve, an electrical box, the roof of outdoor specifications are not included.
- A dust explosion-proof motor (motor having structure to prevent the invasion of the outside substance) is installed on PIE-30SDN and PIE-45SDN.
- For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN or D.
- In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN or D.

PIF-D/SD

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Pulse jet type (By differential pressure detection)

Effect on Kst values of 400
※Except PIF-75D/120D/150D



Check valve
Prevents reverse flow of blow force or fire to protect the worker.



Explosion pressure diffusion port
Pressure from explosion is discharged into air to prevent damage to the equipment.

Molded anti-electrostatic filter	Pulse jet	Inflammable powder/dust that might explode	Max. airflow	Premium efficiency motor ※Except PIF-30D/45D

Model	Kst value (x10 ³ kPa·m/s or less)	Pmax(x10 ³ kPa or less)
PIF-30D	400	11.5
PIF-45D	400	11.5
PIF-60D	400	11.5
PIF-75D	300	11.0
PIF-120D	300	11.0
PIF-150D	300	11.0
PIF-30SD	400	11.5
PIF-45SD	400	11.5

Effective area was calculated based on "Explosive pressure discharge device technical guidelines(Revised version)(NIS-TR-No.38(2005))" in incorporated agency industrial safety institute laws. Above figures are for standard equipment. Please have the target dust evaluated for explosion potential (billed to customer).

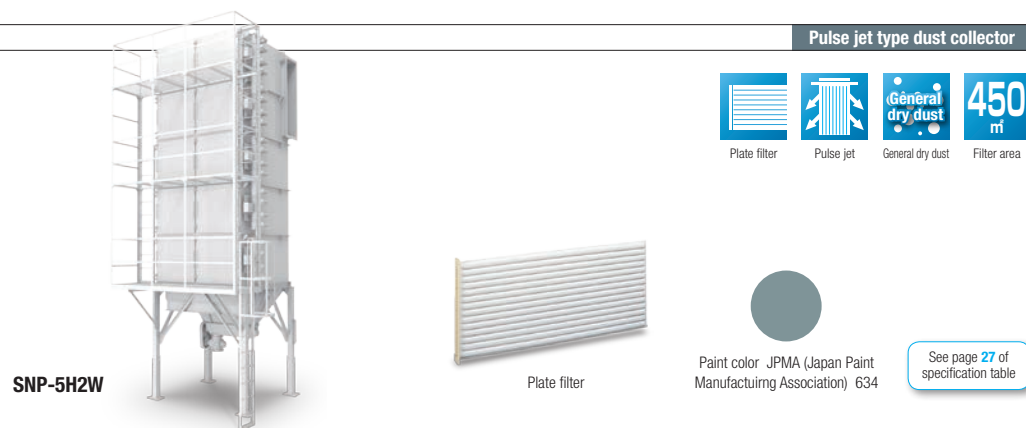
Specifications

Model			PIF-30D		PIF-45D		PIF-60D		PIF-75D		PIF-120D		PIF-150D		PIF-30SD		PIF-45SD																																	
Power supply			3-phase 200V 50/60Hz common use																Frequency 50Hz or 60Hz at 3-phase 200V																															
Motor	Output	kW	1.35		2.0		3.1		5.5		7.5		11.0		1.5		2.2																																	
	HP		1.8		2.6		4.1		7.3		10.0		15.0		2.0		3.0																																	
	Inverter Efficiency		Standard equipment																—																															
			IE3																IE1 (Dust explosion-proof motor)																															
Airflow	m³/min		0	15	30	0	22.5	45	0	35	60	0	50	75	0	65	105	0	100	150	0	15	22	0	22.5	35																								
	cfm		0	529	1059	0	794	1589	0	1236	2118	0	1765	2648	0	2295	3708	0	3531	5297	0	529	776	0	794	1236																								
Static pressure	[kPa]		2.75	2.00	0.80	2.75	2.20	0.40	3.00	2.20	0.50	3.10	2.50	0.90	3.20	2.41	0.59	3.10	2.27	0.72	2.75	1.72	0.49	2.75	1.62	0.35																								
	m²		12.0		18.0		24.0		38.4		57.6		86.4		12.0		18.0		24.0		12.0		18.0		24.0																									
Area	ft²		129.1		193.6		258.2		413.4		620.0		930.0		129.1		193.6		258.2		129.1		193.6		258.2																									
Filter	Quantity		4		6		8		8		12		18		4		6		8		4		6		8																									
	Shape		Molded cartridge (length:500mm) (Anti-electrostatic filter)																Molded cartridge (length:750mm) (Anti-electrostatic filter)																															
	Dust removal		Automatic pulse jet (by differential pressure detection)																Molded cartridge (length:500mm) (Anti-electrostatic filter)																															
Compressed air consumption	[L/min]		36		45		67		75		86		100		36		45		67		36		45		67																									
Diaphragm valve	[pcs.]		2		3		4		4		6		6		2		3		4		2		3		4																									
Recommended breakers	[A]		15		20		30		50		60		75		15		20		30		15		20		30																									
Power cord	m	inch	5 (4-core, without plug)																Option (4-core)																5 (4-core, without plug)															
			196 (4-core, without plug)																Option (4-core)																196 (4-core, without plug)															
Bucket capacity	L		27		38		27×2		22.5×2		22.5×3		22.5×3		27		38		27		38		27		38																									
	U.S.gallon		7.1		10.0		7.1×2		5.9×2		5.9×3		5.9×3		7.1		10.0		7.1		10.0		7.1		10.0																									
Suction port diameter	mm		φ150		φ200		φ250		φ250		φ290		φ380		φ150		φ200		φ150		φ200		φ150		φ200																									
	inch		6		8		10		10		11.5		15		6		8		6		8		6		8																									
Dimensions	mm		607×1243×1569		786×1228×1600		950×1209×1774		950×1519×2292		1398×1650×2389		1484×2009×3055		556×1245×2247		681×1237×2392		556×1245×2247		681×1237×2392		556×1245×2247		681×1237×2392																									
W×D×H	inch		23.9×49.0×61.7		30.9×48.3×62.9		39.0×47.5×69.8		37.4×59.8×90.2		55.0×65.0×94.0		58.4×79.1×118.3		21.8×49.0×88.4		26.8×48.7×94.1		21.8×49.0×88.4		26.8×48.7×94.1		21.8×49.0×88.4		26.8×48.7×94.1																									
Weight	kg		280		340		465		520		710		1020		375		435		375		435		375		435																									
	lb		640		750		1026		1147		1566		2249		827		959		827		959		827		959																									
Paint color	JPMA (Japan Paint Manufacturing Association) S11-344																																																	

SNP

Space saving dust collector from the use of plate filter.

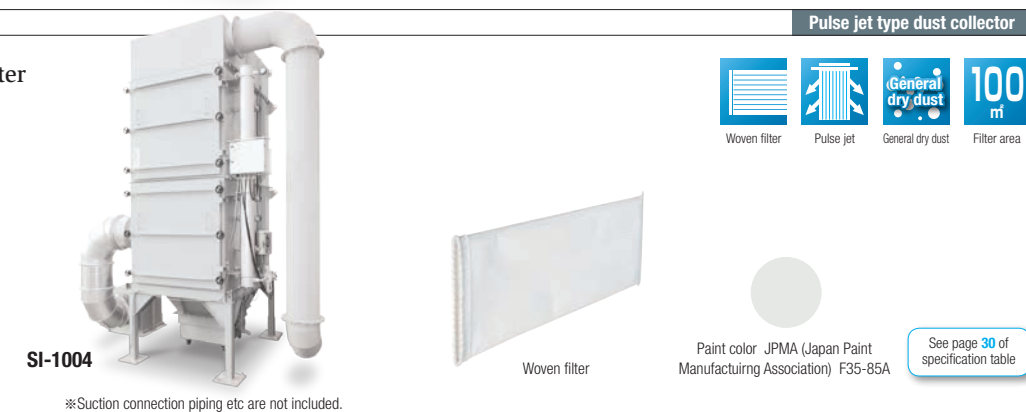
Moderate pressure large blow force



SI

Down flow & Side inlet type woven filter
Safe and hygienic filter replacement

Moderate pressure large blow force

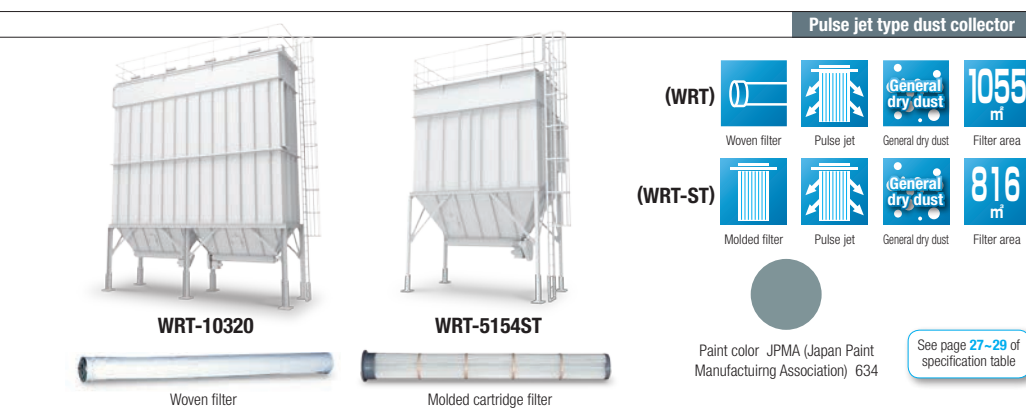


WRT/WRT-ST

Bestseller among large blowforce dust collectors

Large filter selection gives wide-ranging response potential (WRT)
Space saving & low cost by Molded cartridge filter (WRT-ST)

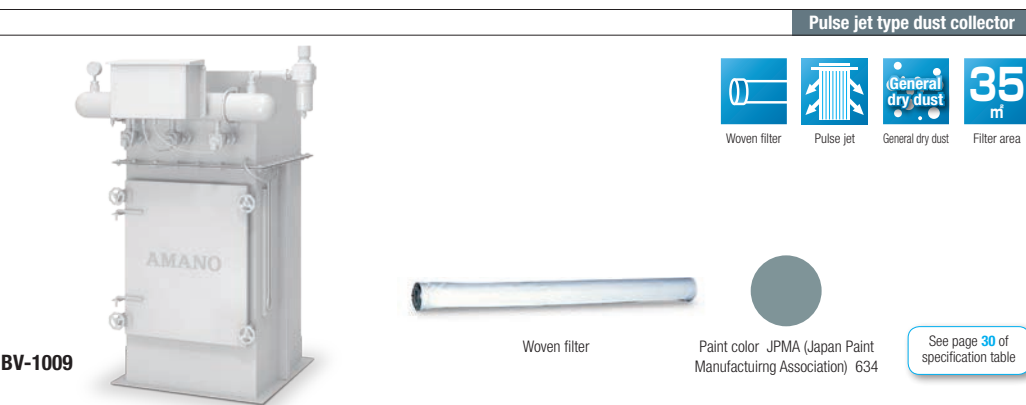
Moderate pressure large blow force



BV

Ideal for air bleeding from silos and hoppers.

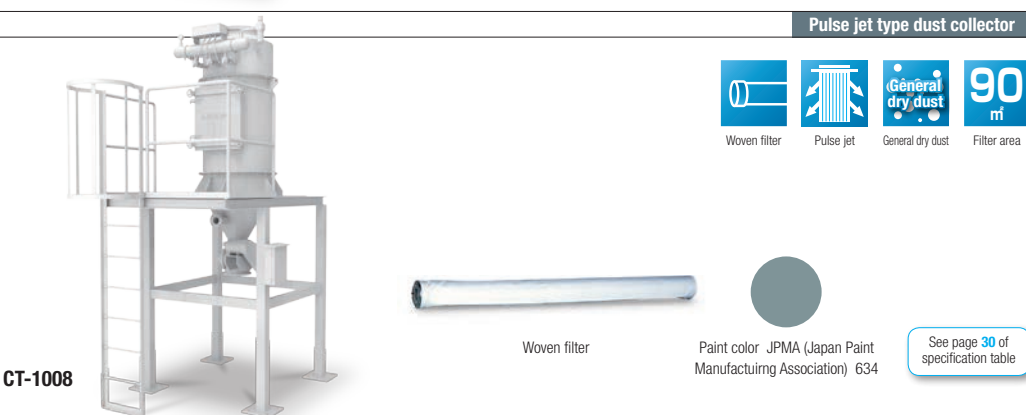
Moderate pressure medium blow force



CT

High vacuum resistant body ideal for pneumatic conveying and central cleaning.

High pressure medium blow force

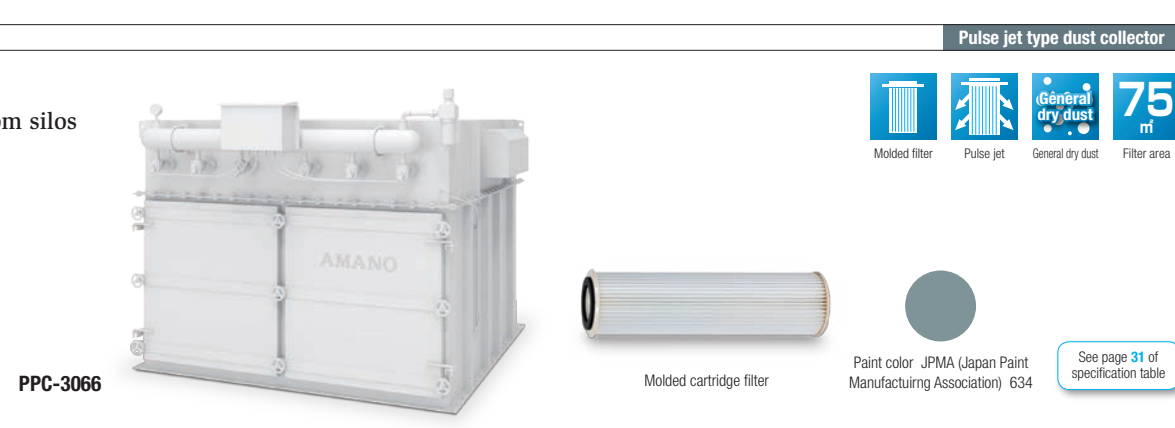


*Performance values might change from those shown on custom order specifications.

PPC

Molded filter type
Ideal for air bleeding from silos and hoppers.

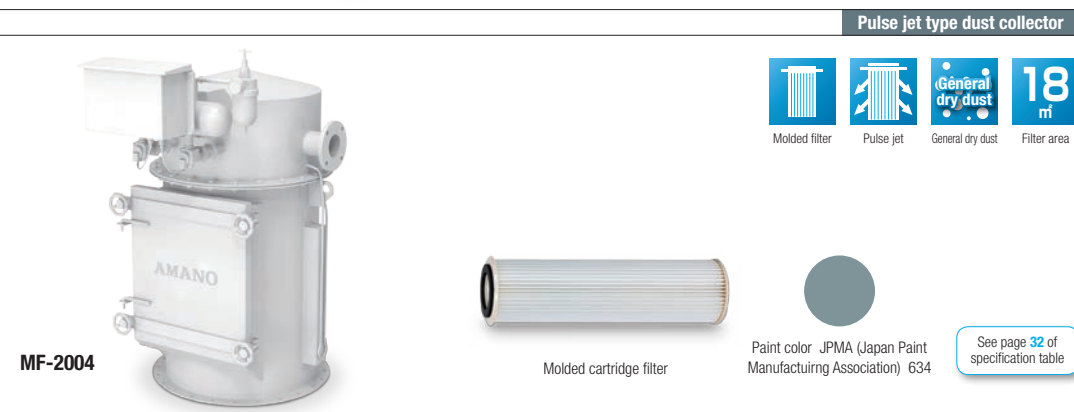
Moderate pressure medium blow force



MF

Compact, cylindrical body is ideal for intake of pneumatic conveying.

High pressure medium blow force



TFP

The bag-in bag-out concept allows replacing filters & ejecting dust without touching the dust.

Bag-in Bag-out



TFP-S

High-pharmacologically-active dust collector.

Effective on high-pharmacologically-active powder

- Bag-in Bag-out type
- Wet-down
- Liner packs



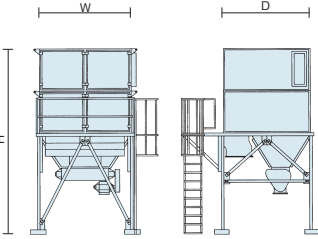
HGD

Removes dioxins, acid gas, heavy metals and fine particles from high temperature incinerated gas.

Compatible with dioxins

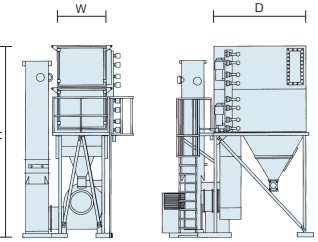


We design to match customer needs.

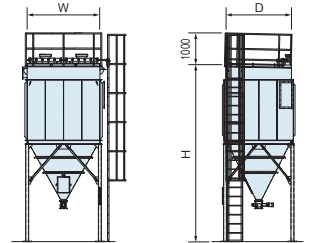


■ **Model description**
Basic unit is expressed by 1H1W. A total of 34 filters are installed inside and provide a total surface area of 45 square meters. Assembling these units horizontally and vertically gives the model type shown at right. Model types combinable as standard configurations in this catalog are listed.

Example : **SNP-3H 2W**
Number of vertical units Number of horizontal units



■ **SNP-M series fans exhaust muffler specifications**
● Fans are selectable from following types.
(Specify a power frequency of 50Hz/60Hz.)
Select from among the SNP-1M
...output 5.5kW-7.5kW-11kW types
Select from among the SNP-2M
...output 11kW-15kW-18.5kW types.
Select from among the SNP-3M
...output 15kW-18.5kW-22kW-30kW types.
● Type of exhaust muffler is determined by the fan type that was selected.



SNP

■ SNP

Model	Dimensions						Filter			No. of valves	Air supplied quantity (L /min)	Weight	
	mm			inch			Area		Quantity			kg	lb
	W	D	H	W	D	H	m ²	ft ²					
SNP-2H1W	1150	2182	4708	45.3	86.0	185.4	90	968	68	8	187	1550	3418
-3H1W	1150	2182	5808	45.3	86.0	228.7	135	1452	102	12	280	2100	4631
-4H1W	1150	2182	6908	45.3	86.0	272.0	180	1936	136	16	420	2500	5513
-2H2W	2300	2182	5031	90.6	86.0	198.1	180	1936	136	16	420	3100	6836
-3H2W	2300	2182	6131	90.6	86.0	241.4	270	2905	204	24	560	4200	9261
-4H2W	2300	2182	7231	90.6	86.0	284.7	360	3873	272	32	700	5100	11246
-5H2W	2300	2344	8331	90.6	92.3	328.0	450	4842	340	40	840	6300	13892

■ SNP-M Series (General purpose filtration system)

Model			SNP-1M	SNP-2M	SNP-3M
Filter Box Unit	Filter area	m ²	45	90	135
		ft ²	484	968	1452
	Quantity		34	68	102
	Dimensions W×D×H	mm	1150×2182×3608	1150×2182×4708	1150×2182×5808
		inch	45.3×86.0×142.1	45.3×86.0×185.4	45.3×86.0×228.7
	Weight	kg	1200	1650	2200
lb		2646	3639	4851	
Dust removal system (Pulse jet: stationary type)	No. of valves		4	8	12
	Air supplied quantity [L/min]		140	187	280
Discharge unit			Rotary valve		
Control panel			Indoor wall-mounted type (standard) / Outdoor type (option)		

Model application range			Applicable model: SNP-1M						
						Applicable model: SNP-2M			
						Applicable model: SNP-3M			
Output	kW	5.5	7.5	11	15	18.5	22	30	
	HP	7.3	10	15	20	25	30	40	
Airflow	m³/min	45	65	90	135	180	200	270	
	cfm	1589	2295	3178	4767	6356	7062	9534	
Static pressure [kPa]		3.92							
Fan type		Single inlet type turbo fan (motor direct-coupled type)							
Auxiliaries		Manually airflow adjusting valve							
Type of exhaust silencer	Exhaust pipe diameter	mm	φ380		φ550		φ650		
		inch	φ15		φ21.7		φ25.6		
	Noise suppression		10 dB (A) reduction from original fan noise						

WRT

■ WRT-3000/5000 Series (with a separate fan)

Model	Dimensions						Filter				No. of valves	Air supplied quantity (L/min)	Weight		
	mm			inch			Area		Quantity	Length			kg	lb	
	W	D	H	W	D	H	m ²	ft ²		mm					inch
WRT-3054B	1200	1810	5185	47.3	71.3	204.2	51.5	554	54	1933	76	6	150	1700	3749
-3072B	1600	1810	5185	63.0	71.3	204.2	68.6	738	72	1933	76	8	200	2000	4410
-3090B	2000	1810	5185	78.8	71.3	204.2	85.8	923	90	1933	76	10	240	2200	4851
-3108B	2400	1810	5779	94.5	71.3	227.6	102.9	1107	108	1933	76	12	290	2500	5513
-3054T	1200	2160	5579	47.3	85.1	219.7	51.5	554	54	1933	76	6	150	1900	4190
-3072T	1600	2160	5579	63.0	85.1	219.7	68.6	738	72	1933	76	8	200	2200	4851
-3090T	2000	2160	5579	78.8	85.1	219.7	85.8	923	90	1933	76	10	240	2500	5513
-3108T	2400	2160	5869	94.5	85.1	231.1	102.9	1107	108	1933	76	12	290	2800	6174
-5054B	1200	1810	5755	47.3	71.3	226.6	67.6	727	54	2540	100	6	150	1900	4190
-5072B	1600	1810	5755	63.0	71.3	226.6	90.1	969	72	2540	100	8	200	2200	4851
-5090B	2000	1810	5755	78.8	71.3	226.6	112.7	1212	90	2540	100	10	240	2500	5513
-5108B	2400	1810	6345	94.5	71.3	249.9	135.2	1454	108	2540	100	12	290	2700	5954
-5054T	1200	2160	6149	47.3	85.1	242.1	67.6	727	54	2540	100	6	150	2000	4410
-5072T	1600	2160	6149	63.0	85.1	242.1	90.1	969	72	2540	100	8	200	2300	5072
-5090T	2000	2160	6149	78.8	85.1	242.1	112.7	1212	90	2540	100	10	240	2600	5733
-5108T	2400	2160	6439	94.5	85.1	253.6	135.2	1454	108	2540	100	12	290	3100	6836
-3126B	2800	1810	5404	110.3	71.3	212.8	120.1	1292	126	1933	76	14	340	2800	6174
-3144B	3200	1810	5404	126.0	71.3	212.8	137.2	1476	144	1933	76	16	390	3200	7056

-3126T	2800	2160	5704	110.3	85.1	224.6	120.1	1292	126	1933	76	14	340	3200	7056
-3144T	3200	2160	5704	126.0	85.1	224.6	137.2	1476	144	1933	76	16	390	3400	7497
-5126B	2800	1810	5974	110.3	71.3	235.2	157.8	1697	126	2540	100	14	340	3200	7056
-5144B	3200	1810	5974	126.0	71.3	235.2	180.3	1940	144	2540	100	16	390	3500	7718
-5126T	2800	2160	6274	110.3	85.1	247.1	157.8	1697	126	2540	100	14	340	3500	7718
-5144T	3200	2160	6274	126.0	85.1	247.1	180.3	1940	144	2540	100	16	390	3900	8510
-5162T	3600	2160	6274	141.8	85.1	247.1	202.8	2182	162	2540	100	18	440	4200	9261
-5180T	4000	2160	6274	157.5	85.1	247.1	225.4	2425	180	2540	100	20	480	4700	10364
-5198T	4400	2160	6274	173.3	85.1	247.1	247.9	2667	198	2540	100	22	530	5000	11025

■ WRT-3000/5000 Series (with an onboard fan)

Model	Dimensions						Airflow		Static pressure [kPa]	Output		Filter				No. of valves	Air supplied quantity [L/min]	Weight		
	mm			inch								Area		Quantity	Length					
	W	D	H	W	D	H	m³/min	cfm		kW	HP	m²	ft²		mm			inch	kg	lb
WRT-3054BF	2565	1810	5185	101.0	71.3	204.2	50	1765	3.43	5.5	7.3	51.5	554	54	1933	76	6	150	2300	5072
							70	2472		7.5	10									
							90	3178		11	15									
							100	3531		11	15									
							120	4237		15	20									
-3072BF	2965	1810	5185	116.8	71.3	204.2	70	2472		7.5	10	68.6	738	72	1933	76	8	200	2600	5733
							90	3178		11	15									
							110	3884		11	15									
							140	4944		15	20									
							180	6356		18.5	25									
-3090BF	3365	1810	5185	132.5	71.3	204.2	90	3178		11	15	85.8	923	90	1933	76	10	240	2800	6174
							110	3884		11	15									
							140	4944	15	20										
							180	6356	18.5	25										
							200	7062	18.5	25										
-3054TF	2565	2160	5435	101.0	85.1	214	50	1765	5.5	7.3	51.5	554	54	1933	76	6	150	2400	5292	
							70	2472	7.5	10										
							90	3178	11	15										
							100	3531	11	15										
							120	4237	15	20										
-3072TF	2965	2160	5435	116.8	85.1	214	70	2472	7.5	10	68.6	738	72	1933	76	8	200	2800	6174	
							90	3178	11	15										
							110	3884	11	15										
							140	4944	15	20										
							180	6356	18.5	25										
-3090TF	3365	2160	5435	132.5	85.1	214.0	90	3178	11	15	85.8	923	90	1933	76	10	240	3100	6836	
							110	3884	11	15										
							140	4944	15	20										
							180	6356	18.5	25										
							200	7062	18.5	25										
-5054BF	2565	1810	5755	101.0	71.3	226.6	70	2472	7.5	10	67.6	727	54	2540	100	6	150	2500	5513	
							90	3178	11	15										
							110	3884	11	15										
-5072BF	2965	1810	5755	116.8	71.3	226.6	90	3178	11	15	90.1	969	72	2540	100	8	200	2800	6174	
							120	4237	15	20										
							140	4944	15	20										
-5090BF	3365	1810	5755	132.5	71.3	226.6	110	3884	11	15	112.7	1212	90	2540	100	10	240	3200	7056	
							140	4944	15	20										
							180	6356	18.5	25										
-5054TF	2565	2160	6005	101.0	85.1	236.5	70	2472	7.5	10	67.6	727	54	2540	100	6	150	2600	5733	
							90	3178	11	15										
							110	3884	11	15										
							140	4944	15	20										
							180	6356	18.5	25										
-5072TF	2965	2160	6005	116.8	85.1	236.5	90	3178	11	15	90.1	969	72	2540	100	8	200	2900	6395	
							120	4237	15	20										
							140	4944	15	20										
							180	6356	18.5	25										
							200	7062	18.5	25										
-5090TF	3365	2160	6005	132.5	85.1	236.5	110	3884	11	15	112.7	1212	90	2540	100	10	240	3200	7056	
							140	4944	15	20										
							180	6356	18.5	25										
							200	7062	18.5	25										
							200	7062	18.5	25										

HSF

Amano’s unique high-sealing rotary feeder brings low-cost and low crush rate.

This is a compact high-pressure feed system using a high-sealing rotary feeder. The dust supply section is simple compared to systems using blow pots. This is a cyclic low-speed high-concentration transfer feed system having a transfer speed of 4 to 6 meters per second so there is almost no danger of crushing. Employing a custom helical rotor drastically reduces crushing of dust particles due to bite-in.



- Minimal crushing
- High quality material conveyance
- Compact



Specifications	
Conveyance speed	1~15m/s
Conveyance quantity	~20t/h
Conveyance distance	~300m
Conveyance pressure	~+300kPa
Air source	Compressor

HAF

Ideal for conveyance dust that cannot be allowed to crush and for long distance conveyance.

Plug shaped particles are pressed, moved and fed by static pressure from conveyance air feed. In the HAF system there is almost no crushing for conveying dust particles since the conveyance speed is low.



- Minimal crushing
- High quality material conveyance
- Long-distance large-volume conveyance



Specifications	
Conveyance speed	1~15m/s
Conveyance quantity	~200t/h
Conveyance distance	~2000m
Conveyance pressure	~+700kPa
Air source	Compressor

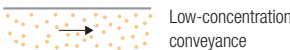
LAF

Ideal for short distance conveyance or conveying from 1 to multiple locations.

By using the dynamic pressure of the conveyance air, the particles are flown through the conveyance pipe at relatively low densities. The conveyance speed is much greater than that of the high-pressure conveyance system at a typical speed of 20 to 30 m/s.



- Low cost
- Multiple conveyance



Specifications	
Conveyance speed	15~40m/s
Conveyance quantity	~100t/h
Conveyance distance	~200m
Conveyance pressure	~+100kPa
Air source	Turbo / Roots blower

VAF

Ideal for conveying/feeding from several locatons to one location.

By sucking both particles and air, the particles are conveyed by the air flow resulting from sub-atmospheric pressure. By using dynamic pressure of the conveyance air, the particles are lifted and transported. The conveyance air speed is typically 20 to 30 m/s. Vacuum conveyance produces cooling and drying effects on the conveyed items, and is best suited in conveying particles from narrow and deep locations.



- Low cost
- Cluster conveyance



Specifications	
Conveyance speed	15~40m/s
Conveyance quantity	~100t/h
Conveyance distance	~200m
Conveyance pressure	~~-60kPa
Air source	Turbo / Roots blower

Test plant

At this plant, pneumatic conveying testing of dust provided by the customer is carried out.

The dust particle handling plant makes conveying tests of the target dust particles for conveying and accumulates data for designing an actual plant. Here, equipment is installed to allow dealing with dust by efficiently gathering data for handling diverse types of dust particles. The conveying distance can be measured from short distances of 39 meters to long distances of 184 meters. Here, 10 or more conveyance test patterns are executed to match the customer's application.



Dust particle handling plant

EV/FV

Installable at a reasonable cost.
Compact pneumatic conveying feeder.



Specifications			
Model		EV-5L	EV-10L
Suction air source		Ejector pump	
Dimensions	mm	φ405×1160	
	inch	16×45.7	
Filter Quantity		1	
Filter area	m ²	0.7	
	ft ²	7.5	
Dust removal		Automatic pulse jet (At fixed interval)	
Compressed air consumption [m ³ /min]		Equivalent to 0.5 screw compressor at 3.7kW	Equivalent to 1.0 screw compressor at 7.5kW
Compressed air coupling port		15A	
Exhaust valve specifications		Weight damper method	
Control system		Air regulation (electrical control also okay-OPT)	
Suction hose diameter	mm	φ25	φ38
	inch	φ1	φ1.5
Main material		SUS or SPHC	
Weight	kg	90	
	lb	199	

Specifications			
Model		FV-3	
Suction air source		Brushless blower motor	
Power supply		3-phase 200V 50/60Hz common use	
Output	kW	2.0	
	HP	2.6	
Dimensions	mm	φ405×1295	
	inch	16×51	
Filter Quantity		1	
Filter area	m ²	0.7	
	ft ²	7.5	
Dust removal		Automatic pulse jet (At fixed interval)	
Compressed air consumption		20 L/min 0.5MPa to 0.7MPa (for pulse jet)	
Compressed air coupling port	mm	6A	
	inch	0.3A	
Exhaust valve specifications		Weight damper method	
Control system		Electrical control	
Suction hose diameter	mm	φ38	
	inch	φ1.5	
Main material		SUS or SPHC	
Weight	kg	80	
	lb	177	

FPV

Small size pneumatic conveying feeder.



Specifications								
Model		FPV-40	FPV-40X	FPV-50	FPV-50X	FPV-65	FPV-65X	
Filter box	Outer diameter (nominal)	mm	φ356 (350A)	φ456 (450A)		φ558 (550A)		
	inch		14(350A)	18(450A)		22(550A)		
Dust removal	Design withstand pressure [kPa]	~50(intake)						
	Method	Automatic pulse jet (At fixed interval)						
	Diaphragm valve [pcs.]	1		2		3		
	Pulse jet compressed air pressure [MPa]	Normally 0.4 to 0.5						
Filter	Name	Standard filter	Resin filter	Standard filter	Resin filter	Standard filter	Resin filter	
	Material	Polyester	Polyethylene	Polyester	Polyethylene	Polyester	Polyethylene	
	Quantity	1	9	2	18	3	27	
	Area	m ²	1.17	1.07	2.34	2.13	3.50	3.20
	ft ²	12.5	11.5	25.1	22.9	37.6	34.4	
Section hopper	Cleaning (water-washing)	×	○	×	○	×	○	
	Suction port diameter (nominal)	38.1 (Sanitary 1.5S ferrule)		50.8 (Sanitary 2.0S ferrule)		63.5 (Sanitary 2.5S ferrule)		
	inch	1.5 (Sanitary 1.5S ferrule)		2 (Sanitary 2.0S ferrule)		2.5 (Sanitary 2.5S ferrule)		
	Slope angle standard (degrees)	60						
	Exhaust port diameter	4.5S (100A)		6.5S (150A)		8.5S (200A)		
Electrical components		ISO standard ferrule						
	Standard (pilot valve box)	Pulse jet board & pilot valve 200V/100V selectable specifications						
Unit material	Material	SUS304						
	Surface treatment	Inner/outer surface buffing (※Inner/outer surface #400)						
Weight	kg	Approximately 55	Approximately 55	Approximately 70	Approximately 75	Approximately 85	Approximately 95	
	lb	Approximately 122	Approximately 122	Approximately 155	Approximately 166	Approximately 188	Approximately 210	

AGR

Water-washable & modular design.

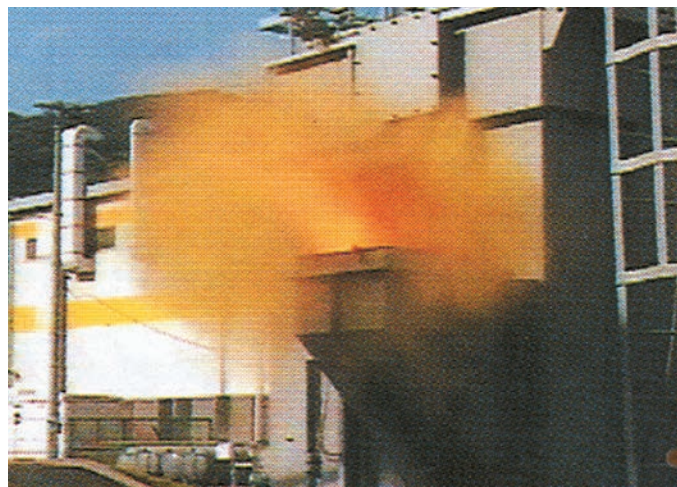


- Space saving
- Small airflow
- Minimal crushing
- No power source required

Specifications		AGR-130	AGR-150	AGR-200M	AGR-200
Model					
Shell diameter	mm	130	150	200	200
	inch	5.2	5.9	7.9	7.9
Overall height	mm	859	972	1050	1166
	inch	33.9	38.3	41.4	46.0
1batch quantity	L	3	4.2	8	12
	U.S.gallon	0.8	1.1	2.1	3.1
Conveying capability [L/h]		30~100	100~300	300~700	500~1200
Filter Quantity		1			
Compressed air consumption at 0.6MPa [L/min]		100-500			
Material of main unit		SUS304/SUS316L			
Filter material		PTFE/SUS316L			
Weight	kg	32	50	—	55
	lb	71	111	—	122

Do you know that...? Hazardous dust collector explosions

Dust explosion. This hazard is not as well recognized as the threat from inflammable gas and fluids. However, compared to the same volume of gas the mass is considerably larger so the explosion is huge. Each dust or powder explosion that occurs leaves behind a tremendous amount of damage and tragedy. Amano does continual R&D work into preventing these dust and powder explosions.



Three conditions leading to dust explosions

Oxygen

Dust in concentration higher than the explosion lower limit threshold

Minimum ignition energy

Dust explosions occur when the 3 conditions of "oxygen", "Dust concentration higher than explosion threshold", and "minimum ignition energy" are all present. If even just 1 of these conditions can be eliminated then dust explosions can be prevented. So the crucial point in preventing explosions is eliminating oxygen or sources of sparks.

Dust and powders that might cause explosions

- Magnesium
- Aluminum
- Aluminum light alloys
- Iron powder(non-oxidized)
- Epoxy resin
- Cornstarch
- Titanium
- Toner

Other inflammable powders

Consult Amano for dust explosion countermeasures



In client consultations for dust explosion pressure diffusion type dust collectors we always make a test analysis of the following items...

■ **Explosion index** **Kst value**

■ **Maximum explosion pressure** **Pmax**

■ **Minimum ignition energy** **MIE**

Test analysis ※To propose the best dust collector equipment.

※Tests fee will be charged Environmental Technology Co., Ltd. does the testing.

■ **Dust explosion test overview (video)**

<http://www.eiseiken.co.jp/service/funjin/index.html>



Guide to selecting hood types & required air blow quantity

■ Capture velocity determined by dust ordinances

Hood models		Capture velocity (m/s)
Enclosure type hood		0.7
External attached hood	Side intake type	1.0
	Downward intake type	1.0
	Upward intake type	1.2

※The capture velocity for the designated dust emission source may differ sometimes from the above content.

Hood installation methods	Capture velocity (m/s)
Method for enclosing entire device containing rotor	0.5
Method for covering opening in hood in a direction where dust caused by rotation of rotor might fly outwards.	5.0
Method for enclosing just the rotor	5.0
Remarks	
1. The capture velocity used in this table is called the capture velocity when all hoods on all simultaneously used local exhaust ventilation devices are open.	
2. The capture velocity used in this table is called the minimum wind velocity through the open side of the hood when the rotor is stopped.	

Hood models	Sample drawing	Airflow (m³/min)
① Enclosure type	<p>Opening surface area : $A(m^2)=L(m) \times W(m)$</p> <p>$A=\frac{\pi}{4} \cdot d^2$</p>	$Q = 60 \cdot A \cdot V_o$ $= 60 \cdot A \cdot V_c \cdot k$ <p>V_o : Average wind velocity at open side[m/s] V_c : Capture velocity[m/s] k : Correction coefficient for irregular wind velocity</p>
② Externally attached type ※Circular or rectangular hood mounted in free space	<p>$A=\frac{\pi}{4} \cdot d^2$ Distance : $X(m)$</p> <p>$A=L \cdot W$ Aspect ratio : $W/L > 0.2$</p>	$Q = 60 \cdot V_c \cdot (10X^2 + A) \cdot k$ <p>k : Correction coefficient for disturbance flow</p>
③ Externally attached type ※Circular or rectangular hood with flange mounted in free space	<p>$A=\frac{\pi}{4} \cdot d^2$</p> <p>$A=L \cdot W$ $W/L > 0.2$</p>	$Q = 60 \cdot 0.75 \cdot V_c \cdot (10X^2 + A) \cdot k$ <p>k : Correction coefficient for disturbance flow</p>
④ Externally attached type ※Circular or rectangular canopy type hood	<p>Canopy perimeter : $P=2(L+W)$ Height coefficient : $H/L \leq 0.3$</p>	$Q = 60 \cdot 1.4 \cdot P \cdot H \cdot V_c \cdot k$ <p>k : Correction coefficient for disturbance flow</p>

■ Correction coefficient

Opening area		Correction coefficient k	
m²	ft²	Enclosure type	Externally attached type
~0.2	~2	1.1	1.2
0.3~0.5	3~5	1.2	1.3
0.6~1.0	6~10	1.3	1.4
1.1~2.0	11~21	1.3	1.5
2.1~3.0	22~32	1.4	1.5
3.1~	33~	1.5	1.5

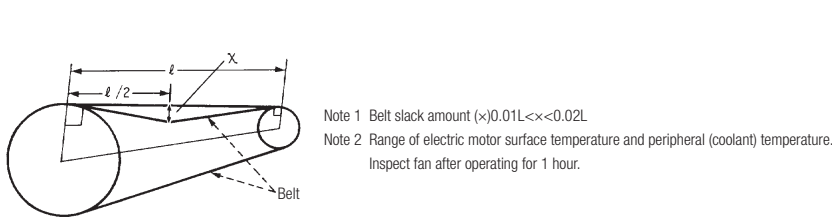
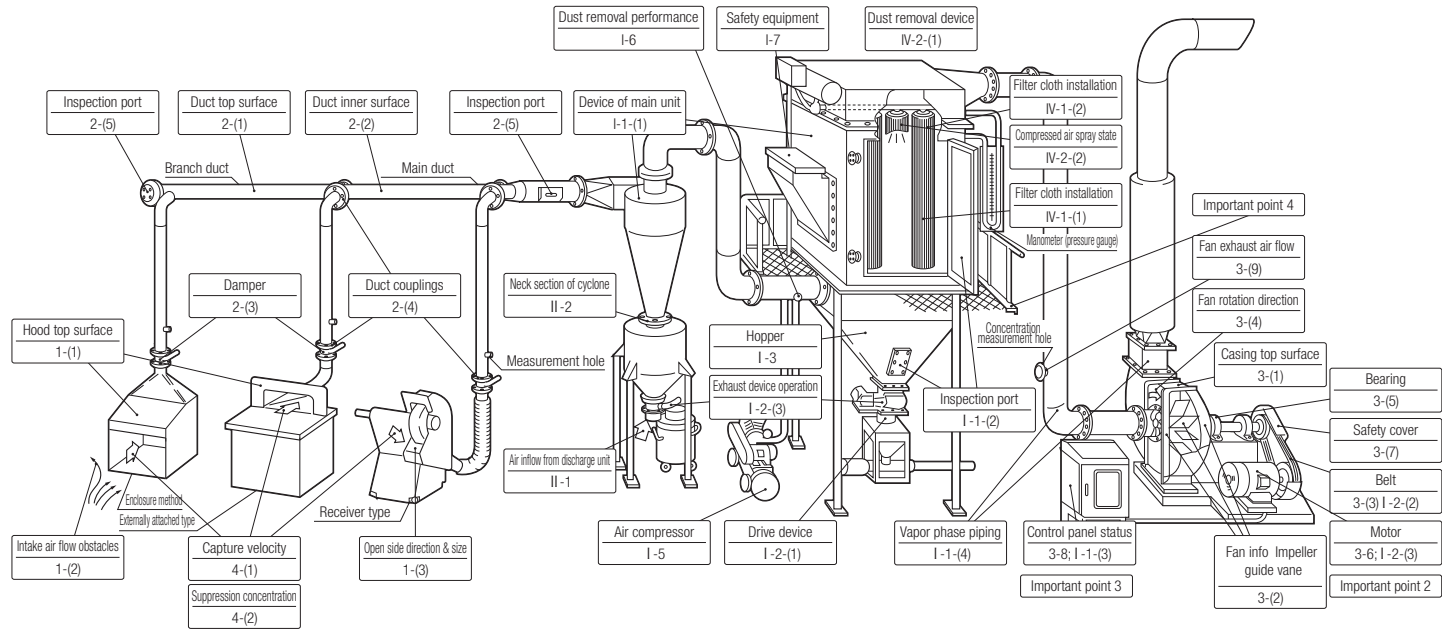
※Correction coefficient k is a given value depending on the situation.

Exhaust ventilation (dust removal) device periodic self-inspection guidelines

Autonomous inspection guidelines (Public bulletin No. 5 No. 6) based on Article 45 item 3 of the labor safety health law.

Daily inspections provide important data for pinpointing causes of equipment breakdowns, the periodic inspection table (6-month as general guide) is vital data for maintaining the equipment service life so be sure to do the daily self-inspections according to schedule.

For local exhaust (dust removal) devices, the periodic self-inspections and their records shall be filed for a period of 3 years.



1.Hood • 2.Duct • 4. intake-exhaust performance

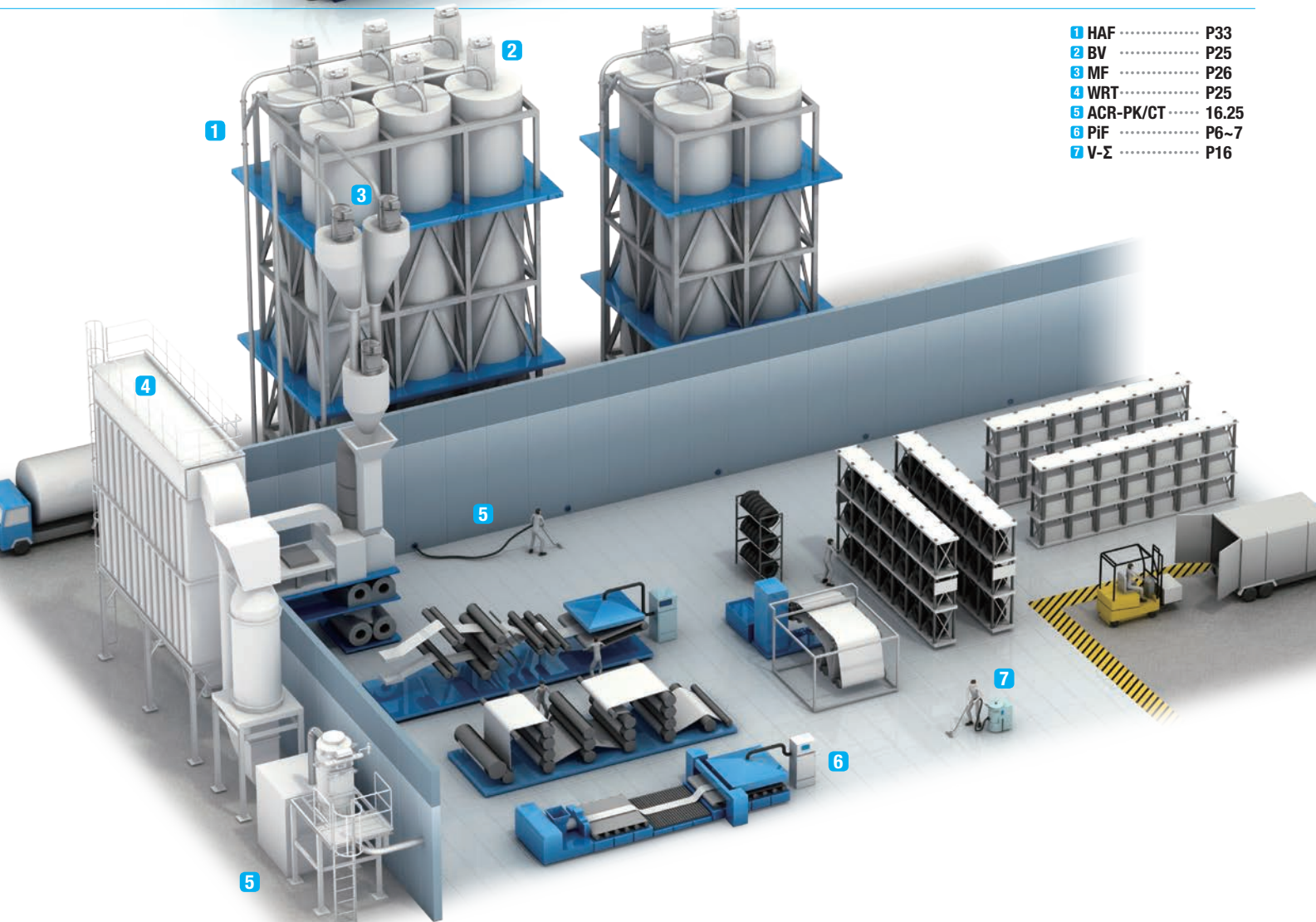
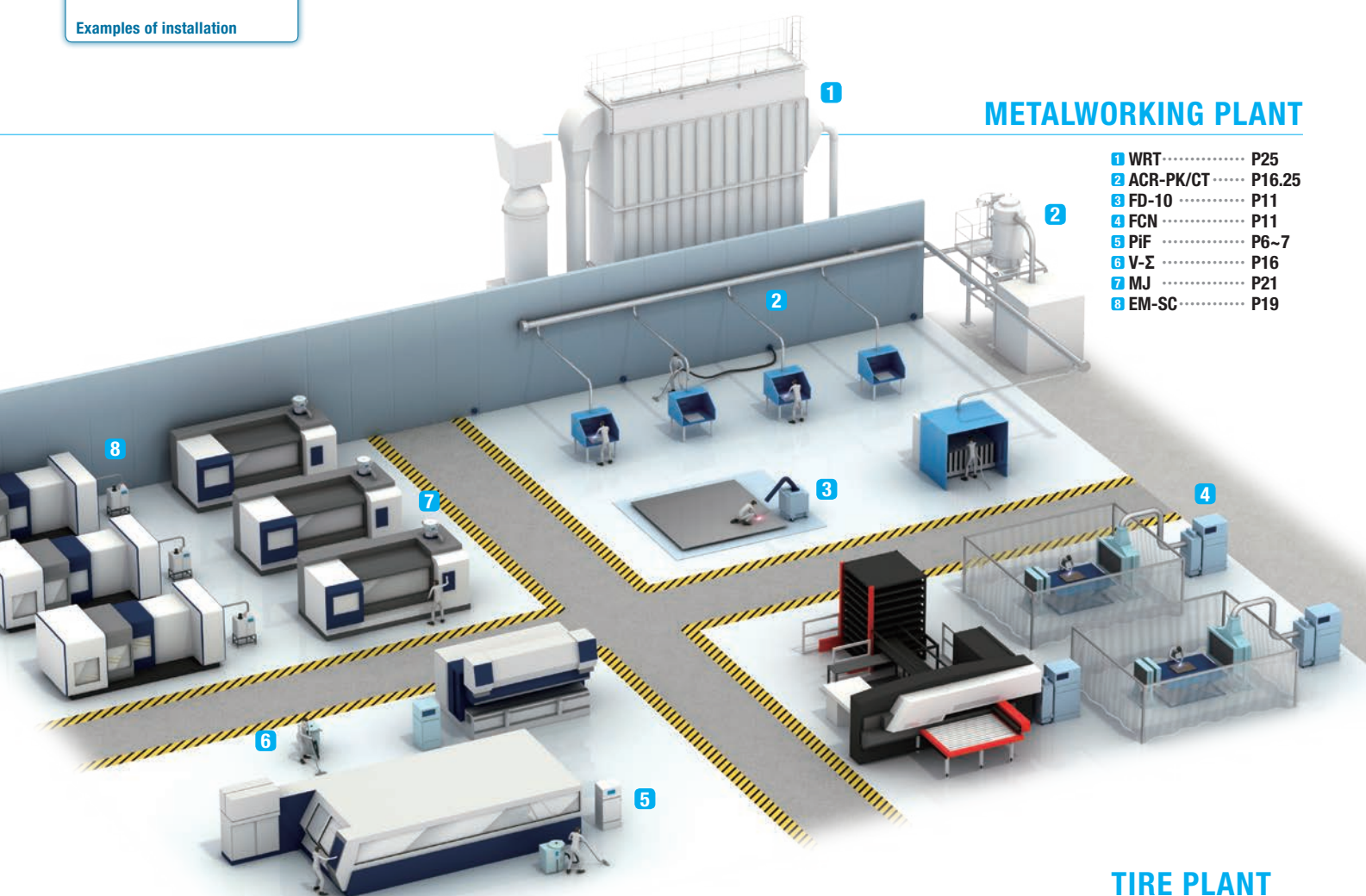
Item		Inspection item	Inspection method and tools	Judgement criteria
Hood and intake-exhaust performance	1- (1)	Check for any wear, corrosion or deformation	Visual, touch	Shall have no abnormalities that lower intake air capacity.
	1- (2)	Intake status (any impediments)	Visual, smoke tester	Shall completely suction in the air stream.
	1- (3)	Receiver type opening side direction & size	Visual	Shall be no dispersal to outside the hood.
	4- (1)	Capture velocity (at designated position)	Wind gauge	Shall be specified value or higher.
	4- (2)	Suppresion concentration (at designated position)	Shall conform to work environment measurement criteria	Shall not exceed the specified value.
Duct	2- (1)	Check for any wear, corrosion or deformation on outer surface	Visual	Shall be no air leaks, and no increased resistance
	2- (2)	Check for any breakage and dust accumulation on inner surfaces	Ultrasonic thickness gauge, manometer, stethoscope to check for surface impacts	Shall be no abnormalities due to wear, corrosion, or depositions. ● Shall be no drastic difference versus design plate thickness ● Shall be no drastic difference in design value for static pressure of duct
Damper	2- (3)	Adjustment & clamped state of air flow adjuster valve opening Cutoff operation of selector valve, etc.	Visual, smoke tester	Shall be in a state capable of maintaining performance Shall operate correctly with light force.
Coupling section	2- (4)	Check for any breakage, missing items, loosenes in coupling section	Visual, auditory, smoke tester, manometer (pressure gauge)	Shall have no air leakage and no inflow. ● Shall be no drastic difference in design value for static pressure of duct
Inspection port	2- (5)	Inspection window open/close state	Smoke tester	Opening and closing shall be smooth with no air leaks.
Safety	Important point 4	Safety measures for inspection scaffold and passage away.	Visual, safety & health regulations	Shall be no corrosion, breakage or looseness.

3. Fan and electric motor

Item		Inspection item	Inspection method and tools	Judgement criteria
Fan	3- (1)	Casing outer surface wear-corrosion and deformation	Visual	Shall be no abnormalities to impair fan functions.
	3- (2)	Check for any wear, corrosion, deformation dust adhering on the casing inner surface & impeller and guide vane.	Visual, thickness gauge, scraper	Shall be no abnormalities to impair fan functions.
Belt	3- (3)	Check for any belt wear/damage, amount of droop, pulley wear, eccentricity, rpm (when there is insufficient intake exhaust performance)	Visual, touch, scale, deflection gauge, tachometer	Shall be no breakage, eccentricity, or looseness.(See Note 1) Shall be specified RPM.
Rotation direction	3- (4)	Check direction (when intake exhaust performance is inadequate)	Visual	Shall be specified rotation direction
Fan bearing	3- (5)	Abnormal bearing sounds, temperature, oil and grease oil quantity and state of impurities	Auditory, touch, surface temperature, visual	Shall be no abnormal sounds, difference versus ambient temperate shall be 40°C(104°F) or less at a surface temperature of 70°C(158°F).
Motor	3- (6)	Status of winding and case, winding and ground terminal for insulating resistor and surface temperature	Insulation resistor tester, surface temperature meter	Shall be specified value or more. (See Note 2 for state of change in surface temperature)
Safety cover	3- (7)	State of safety covers such as for belts.	Visual, touch	Shall be no wear deformation and no looseness in installation section.
Control panel	3- (8)	Display lamp (display cover) name plate broken/missing, looseness in terminals such as causing operating defects in meters, check for discoloration, dust accumulation status	Visual, tester, clamp-meter	Shall be no breakage or missing items and no operating defects. Shall be no accumulated dust adhering
Fan exhaust air flow	3- (9)	Measure the air flow distribution within duct on inlet or outlet port, and calculate the exhaust flow quantity (when intake exhaust performance is low)	Air flow gauge, Manometer	Shall be required air flow or greater to meetjudgment criteria for intake/exhaust performance.
Safety	Important point 2,3	Safety measures for machine and electrical inspections	Safety & health regulations	Shall have hazard prevention measures installed.

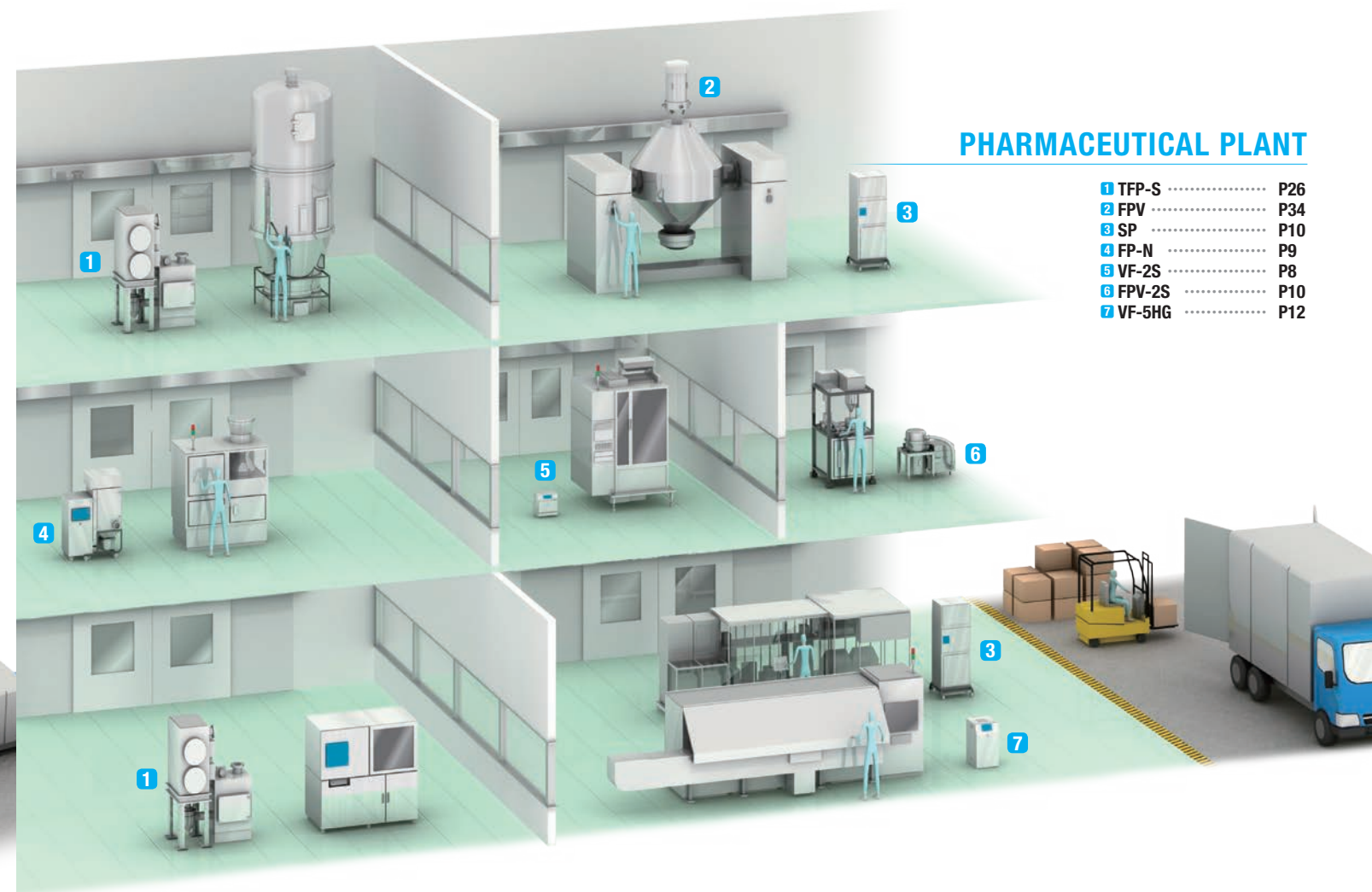
Dust removal device (Air cleaning device)

Item			Inspection item	Inspection method and tools	Judgement criteria
Dust collector	Device main unit section (including coupling duct)	I-1- (1)	Outer surface wear, corrosion, breakage, accumulated dust status	Visual (inspection door or coupling), stethoscope to check for surface impacts, ultrasonic thickness gauge, manometer, air flow meter	There shall be no abnormalities (breakage, looseness, dust, etc.) that lower the performance of the dust collector equipment.
	Inspection port	I-1- (2)	Inspection door open/close state	Touch tasks	Shall open/close smoothly and seal securely.
	Vapor phase piping	I-1- (4)	For the damper: check status of other bypass valves and flexible joints the same as 2-(3)	Visual, auditory	Shall operate smoothly and shall be no abnormalities (breakage, air leakage and dust accumulation, etc.) that lower performance
	Belt etc.	I-2- (2)	For the belt and so on: Check status of lubrication and dust adhering to other chains the same as 3-(3)	Visual	Shall be no abnormalities from dust adhering & no lack of oil.
	Hopper, exhaust damper, rotary valve, etc.	I-3	Status of external and inner sections (inspection door or impact noises) Exhaust status and operation of exhaust equipment	Visual, auditory, listen for surface impact	Shall be no dust leakage or abnormalities due to dust accumulation. Shall be no drop in smooth discharge function, operating defects, abnormal sounds, and abnormal vibration.
	Air compressor	I-5	Investigate pressure and check for abnormalities in meters Check for drain within air receiver	Visual	Pressure shall be in range of design values, and drainage shall be minimal.
	Dust removal performance	I-6	Measure the concentration in the upper and lower flow sections of main unit and find the dust removal efficiency.	Method specified in JIS-Z-8808, etc.	Design values shall be within the specified range.
	Safety equipment	I-7	Check for defects in operation of pressure dispersion vent, fire damper, interlock release valve, etc.	Touch tasks, visual	Shall operation smoothly and satisfactorily.
Cyclone type	Cyclone	II-1	Check status of air inflow at dust exhaust unit of intake type cyclone	Visual, smoke tester	Shall be no intake of smoke or dust.
		II-2	Check dust accumulation on neck section and breakage/wear status	Listen for impacts, ultrasonic thickness gauge	Shall be design thickness or higher with no abnormal deposits/accumulations.
Filtering method	Filter material	IV-1- (1)	Measure the before and after pressure differential and check for any clogs, breakage, deterioration, and dampness	Visual, touch, manometer (pressure gauge)	Shall be no abnormalities that lower filter performance, pressure differential shall be within design value range.
	Filter material installation	IV-1- (2)	Check installation status and breakage in clamping parts of omissions/uneven clamping	Visual, touch	Shall be securely tightened and in a suitable state with nothing loose or missing or drooping.
	Shakedown unit	IV-2- (1)	Check status of reverse flow fan [Same as 3-(9) for wear, corrosion, deformation, and abnormal vibration during operation & abnormal sounds	Visual, auditory	Shall operate smoothly and shall be no abnormalities breakage, abnormal vibrations or sounds that lower dust removal function.
	Compressed air spray device	IV-2- (2)	Check operation spray sounds of pilot and diaphragm valve & for water oil during compressed air, air leaks during non-spray	Auditory, check paper leakage	Shall have normal spray sounds and no air leakage sounds, and no paper leakage in air from spray nozzle.
Safety		Important point 4	Safety measures for inspection scaffold and passage away.	Visual, touch	Shall be no corrosion, breakage or looseness.



Amano environmental products

Our dust collectors, vacuum cleaners, mist collectors, pneumatic conveying systems are used in all sections of production plants. We design and provide ideal systems that meet customer needs and applications.



We also have a number of overseas delivery records. Feel free to consult us whenever you like.

■ Overseas local subsidiaries

http://www.amano.co.jp/corp/associated_kaigai.html



To Ensure Safe Operation

■ Standard Dust Collectors (VNA, PiF, VF-5N, IS-15, Mi, IP, IX, IB, VF-2S, SP, FP-N, FPV-2S and Large-scale Dust Collectors)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- Standard model dust collectors are for collecting dust/powder that is not likely to cause fires or dust explosions.
- Do not suction the following materials:
 - Explosive materialsmagnesium, aluminum, titanium, zinc, epoxies, flour, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Sparkssparks, or dust that contains sparks
 - Fire remainscigarette stubs, ashes, etc.
 - Others.....water, oil, liquid chemicals, toxic dust such as asbestos, etc.
- In case of suctioning dust including sparks produced by polishing or cutting work, Pre-dust box is required. Consult with Amano branch office to select the appropriate model.
- This machine is not an explosion-proof type. Do not install the machine at hazardous area specified by laws.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for installation.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- When using an antistatic filter, use a steel bucket.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.
- As for collecting explosive dust, consult with your Amano representative, since dust explosion pressure diffusion type dust collector are available.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ VNA, FCN

- If piping must be connected to the exhaust port then order an item with sealed structure specifications. When connecting piping to a standard specification (non-countermeasure part) exhaust port, then air leaks might occur from the upper section of the unit.

■ Laser marking dust collector (PiH)

- This device collects dust from fumes and deodorizes odors from those fumes.
- Among other item, please comply with all caution items for standard dust collectors.

■ Dust explosion pressure diffusion type dust collector(VN-SD, VNA-SDN/DN, PiF-D/SD, PIE-SDN/DN, IX-D, IP-D)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- Dust explosion pressure diffusion type dust collector collects flammable dust (with dust explosiveness). Flammable substances, flammable gases and mixtures of flammable dust and gases can not be collected.
- Do not suction the following materials:
 - Highly combustible potentially explosive materials..... magnesium, etc.
 - Flammable materials..... gasoline, thinner, benzene, kerosene, paint, etc.

- Sparks sparks, or dust that contains sparks
- Fire sources such as cigarette stubs, ashes, etc.
- Others..... water, oil, liquid chemicals, toxic dust such as asbestos, etc.
- To change the type of inflammable dust for collection, have an (fee-charging) evaluation made for the extent of dust explosiveness, and only device on dust confirmed to be collectable by this device.
- We are not responsible for any determination of dust-collecting capability in case of a dust explosion risk remains unclear or without evaluation.
- Please consult with Amano branch office and sales office about (fee-charging) evaluation of dust explosion risk.
- Dust explosion pressure diffusion type dust collectors are designed to maintain conditions under which it is difficult for explosions to occur; however, they cannot completely prevent explosions.
- Please evaluate the explosion characteristics of the target dust from the dust explosion hazard test etc., and select an acceptable model for the result.
- Dust explosion pressure diffusion type dust collectors are basically outdoor equipment designed to lower the risk during explosion force dispersion. In case the dust collectors are installed indoors, the dust explosion pressure diffusion increase the risks of damage.
- To set it up indoors, be sure take a protective measure against dust explosion (including protection wall installation, elimination of elements which hamper the diffusion of explosion pressure, etc.). Along with the measure, change it to a fire extinguishing specification to alleviate the hazard induced by explosion pressure diffusion.
- Install dust explosion pressure diffusion type dust collectors in a place where people will not be working above it. Also, do not place any factory equipment on or above the machine.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for installation.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F). (system is not applicable)
- Be sure to ground the machine to protect against electrical shock and to remove static electrical charges.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to the dust collection conditions so that dust will not accumulate in them.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- To prevent static buildup, do not use dust bag.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- In the event a dust explosion occurs please request an inspection by our company.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult with our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ Fume Collector (FD-10, HF, FCN)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The Fume Collector FCN series is designed to collect fumes from welding or cutting as well as sparks emitted during those tasks.
- Do not suction the following materials (they could cause explosions):
 - Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Adhesive materials.....water-soluble mist, oil mist, etc.
 - Otherwater, oil, liquid chemicals, cigarette stubs, ashes, as well as toxic dust from asbestos, etc.

- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.
- As for collecting explosive dust, consult with your Amano representative, since dust collectors equipped with anti-explosion mechanisms are available.

■ DB

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The DB series is a preprocessor device for preventing sparks from entering within the dust collector.
- Do not suction the following materials:
 - Explosive materialsaluminum, magnesium, titanium, zinc, epoxies, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Abrasive dust.....such as dust emitted from high-speed cutters and grinders, etc.
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Otherwater, oil, liquid chemicals, paper or other combustible waste, as well as toxic dust from
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.

■ SR

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The SR Series dust collectors are preprocessor devices designed to prevent dust collector filter blockages and allow a long-term filter replacement cycle.
- If the aim is spark prevention then use the bucket type.
- Do not suction up the following materials:
 - Explosive materialsaluminum, magnesium, titanium, zinc, epoxies, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Others.....water, oil, liquid chemicals, toxic dust such as asbestos, etc.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or dust bag.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.

■ Industrial vacuum cleaners•concentrated cleaning systems (V-Σ, IPR/IXR, central cleaning)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This device is for collecting ordinary dust/powder that is not likely to cause fires or dust explosions.
- Do not suction the following materials:
 - Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Sparkssparks, or dust that contains sparks
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Other fluidssuch as water, oil, liquid chemicals, etc.
- If there is a danger of suctioning sparks when collecting flammable dust from polishing work and so forth, consult with your branch or sales office to select the appropriate model.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ Dust explosion pressure diffusion type industrial vacuum cleaner (V-SDR)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The collecting dust of the dust-explosion pressure diffusion type industrial vacuum cleaner shall be the combustible dust of which we are ensured of dust-collecting capability by the evaluation of its dust explosion hazardous characteristics.
- Do not suction the following materials:
 - Highly combustible potentially explosive materials..... magnesium, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Sparkssparks, or dust that contains sparks
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Other fluidssuch as water, oil, liquid chemicals, etc.
- To change the type of inflammable dust for collection have an (fee-charging) evaluation made for the extent of dust explosiveness, and only use on dust confirmed to be collectable by this device.
- We are not responsible for any determination of dust-collecting capability in case of a dust explosion risk remains unclear or without evaluation.
- Please consult with Amano branch office and sales office about (fee-charging) evaluation of dust explosion risk.
- Dust explosion pressure diffusion type dust collectors are designed to maintain conditions under which it is difficult for explosions to occur; however, they cannot completely prevent explosions.

- Install dust explosion pressure diffusion type dust collectors in a place where people will not be working above it. Also, do not place any factory equipment on or above the machine.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock and to prevent static electrical charges.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket.
- To prevent static buildup, do not use dust bag.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- In the event a dust explosion occurs please request an inspection by our company.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consults our company beforehand.

■ VF-2LD

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The collecting dust shall be limited to general particulates and combustible organic perticulates, which are ensured the dust-collecting capability by dust explosion risk assenment as well as with dust explosibility numerically expressed as follows.
Kstvalue 300×10³kPam/s or less
Pmax: 11×10³kPa or less
- Do not suction the following materials:
 - Potentially explosive combustible dust.....magnesium, aluminum, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Sparkssparks, or dust that contains sparks
 - Others.....toxic dust such as asbestos and fluids such as liquid chemicals
- To change the inflammable organic dust targeted for collection, make an evaluation of the extent of that dust's explosiveness, and only use on dust confirmed to be collectable by this device. We are not responsible for any determination of dust-collecting capability in case of a dust explosion risk remains unclear or without evaluation.
- Please consult with Amano branch office and sales office about (fee-charging) evaluation of dust explosion risk.
- This device has a structure designed to prevent explosions however it cannot completely prevent explosions..
- Remove all combustible material within 4.7 meters above the explosion discharge port and utilize non-combustible material.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Always connect to ground regardless of whether operating, stopped, or performing maintenance.
- Use electrically conductive material in piping such as hoses and ducts, and satisfy the condition of a resistance value of 10⁶Ω/cm or less.
- Always connect to ground for tasks such as shakedown of dust adhering to filters and dust exhaust (discharge), and have the worker perform the tasks after removing static charges accumulated on the workers themselves.

- Do not extract buckets right after shakedown of filters where dust is adhering.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas.
- Discharge dust collected in the bucket every day, and do not allow dust to accumulate within the bucket.
- To prevent static buildup, do not use dust packs.
- Devices where explosions occurred cannot be reused.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ Oil and Water-Soluble Mist Collectors (EM-eII, EM-eH, EM-SC, EM-SCII,t,MZ, MJ, MS)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This machine is designed to handle mist of water-soluble and oil based cutting fluids.
- During intake (suction) of oily mist in the MZ-MJ series, attach and use the after-filter option.
- Do not suction the following materials:
 - Flammable materialsgasoline, thinner, benzene, kerosene, paint, etc.
 - Dust or fumes
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Other fluidssuch as water, water vapor, chemicals
 - Oil or mist with a flash point lower than 80°C(176°F)
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Use the machine at below maximum inlet concentration.
- This device cannot remove odors or gas component.
- Use the EM-eH for die casting machines.
 - Do not use in magnesium die-casting machines.
 - Do not utilize parting agents (mold lubricators) containing diluted kerosene.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- If you want to use the machine to suction exhaust gases from vacuum pumps, combustion engines, etc., please inform our branch or sales office of the suction conditions and find out whether or not you can use this machine.
- Perform maintenance of electrodes according to the following items.
 - Inspect for dust contamination adhering to parts at least once a week.
 - If dust or contamination has deposited up to 2mm(0.07inch) at time of inspection then wash it away.
 - Periodically wash at least once every 3 months.
- When making inspections and replacing filters and components always cut the power and check that the fan rotation has completely stopped before starting the task.
- Do not use oily detergent adhering to the collecting unit or inflammable substances for cleaning the unit. Operating the unit with fluid containing inflammable substances may cause it to ignite and lead to explosions or fires.
【Banned inflammable substances】
 - Liquids such as gasoline, kerosene, thinner, toluene
 - Inflammable detergents (Detergents marketed under commercial names such as parts cleaners and brake cleaners)

- Use soluble detergent for oil/grease removal when cleaning the main unit and adhered oil of the collecting unit.
Always comply with the instructions listed on the detergent.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ Water-Soluble Mist Collectors (MC-45)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This machine is designed to handle water-soluble mist.
- Do not suction the following materials:
 - Flammable materialsgasoline, thinner, benzene, kerosene, paint, etc.
 - Dust or fumes
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Other fluidssuch as water, water vapor, chemicals
 - Oily mist generated from oily cutting fluid
 - To suction oil mist, use another model designed to collect oil mist.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Use machine at below maximum inlet dust concentration.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Always connect to ground to prevent electrical shocks.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- This device cannot remove odors or gas component.
- If piping must be connected to the exhaust (discharge) port then order an item with sealed structure specifications.
When connecting piping to a standard specification (non-contermeasure part) exhaust port, then air leaks might occur from the upper section of the unit.

■ SS-N

- To ensure proper usage of this product please read the instruction manual carefully before using.
- Do not allow intake/suction of the following materials:
 - Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - Adhesive materials.....Water-Soluble Mist, oil mist, etc.
 - Other fluidssuch as water, oil, liquid chemicals
- Absolutely never operate this devices if the internal water level is not at the correct level.
- Please consult Amano branch office in the case of freezing in the winter season, cold areas, and outdoor installations.
- Remove the trapped dust and discharge it every day as sludge.
Discharge the sludge according to related legal regulations as specified by each company.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device.
- Be sure to use pipes with no droop and an appropriate diameter and keep them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Always connect to ground to remove static charges and to prevent electrical shock.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).

- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas.
If intending to use this device outside Japan then please consult our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ Laser marking dust collectors (VF-5HG,VF-5HN,VF-5H)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This machine is for collecting fumes generated by laser markers and other items and deodorizes those fumes.
- Do not suction the following materials:
 - Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
 - Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
 - Corrosive substance.....chlorine gas, chlorine-sulfuric acid gas, hydrogen fluoride, etc.
 - Sparkssparks, or dust that contains sparks
 - Fire sourcessuch as cigarette stubs, ashes, etc.
 - OtherToxic dust such as asbestos and fluid such as water, oil, liquid chemicals, etc.
- Before selecting a particular model, please consult with us beforehand if the machine must intake (suction) dust containing sparks.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device.
- Keep the operating ambient temperature between 5 and 40°C(41 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with no droop and with an appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consults our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

■ TFP,TFP-S,HGD, Pneumatic Conveying Systems

- Be sure to read the instruction manual thoroughly before getting started, and use the machine correctly.